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FEDERAL AID in FISH and WILDLIFE RESTORATION

1983

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FEDERAL AID in FISH and WILDLIFE RESTORATION

1983

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Annual Report on Dingell-Johnson and Pittman-Robertson Programs for the Fiscal Year Ending September 30, 1983

Prepared by

U.S. Fish and Wildlife Service
Department of the Interior
Washington, D.C.

CONTENTS

	Page
PROGRAM REVIEW FOR 1983	v
STATISTICAL SUMMARIES FOR 1983	
Table 1 Fish Restoration Apportionments, Obligations, Reversions and Balances Fiscal Year 1983	2
Table 2 Wildlife Restoration Apportionments, Obligations, Reversions and Balances, Fiscal Year 1983	3
Table 3 Lands Acquired in Fee Title, Fiscal Year 1983	4
Table 4 Lands Acquired in Fee Title, Fiscal Years 1938 - 1983	5
Table 5 Access to Public Hunting and Fishing Grounds, Fiscal Year 1983	6
Table 6 Access to Public Hunting and Fishing Grounds, Fiscal Years 1938 - 1983.	7
Table 7 Wildlife Management Areas and Wildlife Refuges Acquired, Developed or Managed as of September 30, 1983	9
Table 8 Expenditures and Obligations for Waterfowl, Fiscal Years 1938 - 1983	10
Table 9 Fishing Lakes Constructed or Restored, Fiscal Year 1983	13
Table 10 Fishing Lakes Constructed or Restored, Fiscal Years 1951 - 1983	14
Table 11 Project Segments Started During Fiscal Year 1983	16

PROGRAM REVIEW

GENERAL

The Federal Aid in Fish and Wildlife Restoration programs, which began in 1938, are administered by the U.S. Fish and Wildlife Service as a national effort to strengthen the ability of the State to preserve, protect, and enhance fish and wildlife resources and to increase public enjoyment of these resources. An integral part of State fish and wildlife management, these grant-in-aid programs are the product of two pieces of legislation--the Federal Aid in Wildlife Restoration Act (Pittman-Robertson Act) and the Federal Aid in Sport Fish Restoration Act (Dingell-Johnson Act).

The Pittman-Robertson Act (P-R), enacted in 1937, culminated efforts to put State wildlife funding on a secure basis. To safeguard the funding, a "Federal Aid to Wildlife Restoration Fund" was created for allocation among the States. Today this fund is comprised of revenue collected by manufacturers from excise taxes on sale of sporting arms and ammunition, archery equipment, and handguns. In order to be eligible to participate in the program, States were required to pass legislation which included a prohibition against the diversion of hunting license fees for any purpose other than the administration of the State fish and wildlife agencies. Over the years, this requirement has assured each State a dependable source of funding.

The Dingell-Johnson Act (D-J), passed in 1950, was modeled after the P-R Act to create a parallel program for sport fish management and restoration. Funds for D-J are derived from excise taxes collected by manufacturers on fishing rods, reels, creels, and artificial lures, baits, and flies.

In 1970, a hunter education program was authorized by an amendment to the P-R Act which designated one-half of the excise tax on handguns as its source of revenue. A further amendment to the Act in 1972 added one-half of the excise tax on archery equipment as an additional revenue source.

Excise tax receipts are appropriated to the U.S. Fish and Wildlife Service, through automatic appropriation authority, to fulfill the purposes of the Acts. Collected each fiscal year by the Treasury department, the funds are made available for use in the year following collection. After making modest deductions for the administration of the Acts, the remaining funds are apportioned to the States in accordance with formulae outlined in each Act. These formulae are based on the land area and number of paid hunting and sport fishing license holders of each State. Funds apportioned for hunter education, however, are distributed according to each State's population. Puerto Rico, Guam, American Samoa, and the Virgin Islands receive a fixed percentage of funds.

To utilize the funds apportioned, State fish and wildlife agencies select projects to be funded, then submit the proposals to the Service for review and approval. Each project must address a need and be designed in such a way to meet that need. Once approved, the States carry out the work and, upon completion of the project, are reimbursed for up to 75 percent of approved costs.

A unique feature of the program is the flexibility afforded the States in the use of funds. No two States have quite the same needs; therefore, no two States spend their funds exactly alike. For example, States that lack adequate public land or other large recreational areas may concentrate their efforts on buying land for fish and wildlife management areas; other States make use of their funds for resource inventories and research; still others may create or improve fishing lakes or wildlife habitats. The only major legal constraints on the States are that Federal Aid Program funds may not be used for law enforcement or public relations.

WILDLIFE RESTORATION

Throughout the year, work was performed in the areas of development, research, and acquisition, coordination, and hunter education.

Under the category of development, the States carry out activities primarily directed to improving wildlife habitat, managing wildlife areas, and providing for public use of wildlife resources. This includes planting food for wildlife, posting boundaries, building roads and trails, controlling noxious vegatation, and trapping and restocking wildlife to suitable ranges.

Wildlife research, including surveys, investigation, and basic studies, was conducted in all the States, Guam, Puerto Rico, and the Virgin Islands. Research activities were primarily directed toward assisting and improving management efforts to meet the State's responsibilities to the resources and recreationists.

The increasing need for public ownership of lands to provide for restoration and management of wildlife and public use of wildlife is reflected in the acquisition programs of the States. Continuing efforts by the States to ensure the necessary acquisition toward attainment of this objective result in the purchase of numerous acres yearly, varying from agricultural lands to forests to wetlands.

Hunter education projects include training in the safe handling and use of firearms and archery equipment, hunter responsibilities, survival, hunter ethics, and basic wildlife management. In addition to the education program, funds can also be used for construction, operation, and maintenance of public target ranges.

FISH RESTORATION

During 1983, development projects provided for the restoration of fishing waters, habitat improvement, lake and stream rehabilitation, and the installation of public use facilities.

Land control for public use through purchases and easements is essential in maintaining and increasing the fishing waters available in the States. Land acquisition projects active in the States during the year involved acquiring land for lake development and for fishing access entry points to provide public use of rivers, streams, and lake shorelines.

Fishery research, ranging from surveys and investigations to basic studies, was conducted in the States, American Samoa, Guam, and Puerto Rico. Emphasis has continued for information on fish populations and characteristics, general inventories, experimental management techniques, nutritional requirements, disease and parasite problems, and the evaluation of practices such as stocking rates, regulation changes, and chemical controls.

ADMINISTRATIVE FUNDS

The P-R and D-J Acts allow the Secretary of Interior to deduct up to 8 percent of the excise tax receipts for general program administration. In fiscal year 1983, $2,201,798 were deducted for administration of the D-J program which represents 6.3 percent of the tax receipts. For P-R administrative purposes, $4,394,029 were deducted, representing 3.9 percent of the tax receipts.

In addition to the funds directed toward the normal administration of the Federal Aid programs, more than $870,000 were used for the following:

1. Library Reference Service Contract $185,000
2. Rotenone Registration Studies $195,000
3. 1980 National Survey of Fishing, Hunting, and Wildlife Associated Recreation $240,000
4. Nongame Funding Study . . . . . $ 70,000
5. Reservoir Symposium . . . . . $ 30,000
6. Migratory Bird Program $150,000

REVERTED FUNDS

Federal Aid funds apportioned to the States are available for obligation and expenditure during the fiscal year of apportionment through the succeeding fiscal year. After this period, unused funds revert to the Fish and Wildlife Service. Federal Aid in Wildlife Restoration reverted funds are used to carry out the purposes of the Migratory Bird Conservation Act; Fish Restoration funds are used for the Service's fishery research programs. In fiscal year 1983, reverted funds were allocated for the following:

1. Striped Bass Study . . . . . $ 24,051
   Through the National Reservoir Research Program, Fayetteville, Arkansas, and the University of Oklahoma, a study is being made of striped bass population dynamics and predator/prey interactions.

2. Phosphorous Reduction Studies . . . . . $ 23,000
   Studies to reduce phosphorous in salmonid diets are being performed at the Tunison Laboratory of Fish Nutrition, Cortland, New York.

3. Stochastic Model Development . . . . . $ 16,400
A study to develop a stochastic model to analyze exploitation strategies for white bass is being conducted by Great Lakes Fishery Laboratory, Ann Arbor, Michigan in cooperation with the Ohio Cooperative Fishery Research Unit, Columbus, Ohio.

4. Publication Costs . . . . . $ 1,000
Payment of costs for the publication entitled "Coho Salmon Pan-Smolt Transformation and Out-Migration as Affected by Arsenic." Columbia National Fishery Research Laboratory, Columbia, Missouri.

5. Publication of Two Papers . . . . . $ 2,000
Payment of publication costs for two papers describing research on contaminant impacts on striped bass larvae. Columbia National Fishery Research Laboratory, Columbia, Missouri.

6. Aluminum Residues Analysis . . . . . $ 6,000
Research program todevelop an analysis of aluminum residues in brook trout is underway at the Columbia National Fishery Research Laboratory, Columbia, Missouri.

7. Heavy Metal Toxicity Levels . . . . . $ 25,000
Heavy metal toxicity levels in striped bass are the subject of a study at Columbia National Fishery Research Laboratory, Columbia, Missouri.

8. Blueback Herring Study . . . . . $ 5,000
Southeastern Reservoirs Investigations, Clemson, South Carolina is responsible for a study of life history parameters of blueback herring in southeastern reservoirs.

9. Cooperative Education Agreement . . . . . $ 9,972
Support of a Cooperative Education Agreement (CEA) for a woman doctoral student developing techniques for sex reversal of fish at the Southeastern Fish Cultural Laboratory, Marion, Alabama.

10. CEA in Wisconsin . . . . . $ 9,800
Support of a CEA for a minority doctoral student working on invertebrate population dynamics, National Fishery Research Laboratory, LaCrosse, Wisconsin.

11. CEA in Michigan . . . . . $ 5,000
Support of a CEA for a M.S. level female student to define bloater stock identification in Lake Michigan, being done at Great Lakes Fishery Laboratory, Ann Arbor, Michigan.

12. CEA Support in Washington . . . . . $ 10,500
At Seattle National Fishery Research Center, Seattle, Washington support is provided for a female doctoral student to investigate therapeutic control of fish diseases.

13. Botulism Control Studies . . . . . $ 7,000
Studies are underway of the waterfowl population at Kern National Wildlife Refuge to develop ways of providing effective control of botulism.

14. Sandhill Crane Predation . . . . . $ 8,000
Effective means of controlling predation on sandhill cranes is underway at the Malheur National Wildlife Refuge.

15. Telemetry Study at Kern NWR . . . . . $ 8,100
At the Kern National Wildlife Refuge a study described as drainwater study/Black brant telemetry study is in progress.

16. Factors Limiting Aquatic Vegetation . . . . . $ 35,000
A study to evaluate factors limiting aquatic vegetation in impoundments is underway at Laguna Atascosa National Wildlife Refuge.

17. Publication Support . . . . . $ 45,000
Publication and distribution costs are provided for the new publication, "Exploring the Flyways."

18. Model Development for the Snow Goose . . . . . $ 10,000
Modeling for a study of the snow goose population has begun at the De Soto National Wildlife Refuge.

19. Effects of Impoundment Management . . . . . $ 20,000
At the Swan Creek National Wildlife Refuge a study has been undertaken to evaluate effects of impoundment management on invertegrates in relation to waterfowl.

20. Study of Effects of Drawdown . . . . . $ 8,000
A study to determine the effects of drawdown on impoundment vegetation is taking place at the Agassiz National Wildlife Refuge.

21. Management of Moist Soil Plants . . . . . $ 40,000
Taking place at the Mingo and Swan Lake National Wildlife Refuges there is a study on research management of moist soil plants for ducks.

22. Mid-Continent Waterfowl Management Unit Project . . . .$ 40,000

23. Snow Goose and Black Duck Studies . . . . . $ 10,000
Studies are continuing on populations of the snow goose and the black duck.

24. Marsh Management and Mosquito Control . . . . . .$ 10,000
A study is being made at the Parker River National Wildlife Refuge to determine the effects of marsh management and mosquito control on black ducks.

25. Waterfowl Disease Control . . . . . $ 50,000
An evaluation of methods of controlling waterfowl disease is in progress at the Rainwater Basin Wetland Management District.

26. Migratory Bird Studies . . . . . $ 75,000
At the Arctic National Wildlife Refuge baseline migratory bird studies are taking place on that portion of the refuge affected by Section 1002 of Alaska National Interest Lands Conservation Act.

27. Special Surveys for Black Ducks . . . . . $ 32,000
Procedures are underway to develop and evaluate special surveys for black ducks.

28. Specialized Telemetry Transmitter . . . . . .$ 25,000
Work is being done to develop specialized telemetry transmitters for use in future observations and studies.

29. Marine Birds Studies $140,000
Studies are continuing in Alaska having to do with special problems of marine birds.

30. Status of Duck Viral Enteritis . . . . . $ 80,000
Because of the problems surrounding the disease, there are activities ongoing that will attempt to assess the status of duck viral enteritis (DVE) at the present time.

31. Stabilized Regulations $577,000

32. Mallard Production Increase . . . . . .$ 50,000
To determine the potential to increase mallard production is the purpose of a study on North Dakota Production Areas.

33. Black Duck Publicity . . . . . $ 75,000
Support of an intensive publicity campaign to arouse public awareness of problems related to the black duck.

34. Impacts of Using Tile Drainwater . . . . . $ 75,000
At the Kern National Wildlife Refuge a study is in progress to determine and assess the impacts of using tile drainwater on refuge wetlands.

35. South American Wetland Inventory . . . . . $ 15,000

36. Data Collection and Manipulation . . . . . $ 80,000
Work is ongoing to construct a waterfowl model through the collection and manipulation of wetland and other data.

37. General Administrative Services . . . . . .$ 95,680

Statistical Summaries

for Fiscal Year

1983

TABLE 1. FISH RESTORATION APPORTIONMENTS, OBLIGATIONS, REVERSIONS AND BALANCES
FISCAL YEAR 1983

State	Balance 10-01-82	Apportionment F.Y. 1983	Reversions to S.F.R.P.*	Net Project Obligations	Unobligated Balance 9/30/82
Alabama	$ -0-	$ 540,262.00	$ -0-	$ 540,262.00	$ -0-
Alaska	800.00	1,639,000.00	-0-	1,600,052.00	39,748.00
Arizona	200,763.16	707,281.00	-0-	588,952.92	319,091.24
Arkansas	113,503.67	564,564.00	-0-	622,741.98	55,325.69
California	72,408.94	1,639,000.00	-0-	1,710,813.97	594.97
Colorado	1,538.26	843,469.00	-0-	845,007.26	-0-
Connecticut	65,740.61	327,800.00	14,393.41	346,650.32	32,496.88
Delaware	22,350.77	327,800.00	-0-	308,638.42	41,512.35
Florida	-0-	663,744.00	-0-	633,744.00	-0-
Georgia	191,686.46	667,870.00	-0-	595,817.49	263,738.97
Hawaii	3,926.98	327,800.00	-0-	330,772.72	954.26
Idaho	145,411.49	574,969.00	-0-	567,814.60	152,565.39
Illinois	2,005.59	713,180.00	-0-	691,921.41	23,264.18
Indiana	157,295.70	516,696.00	-0-	650,798.08	23,193.62
Iowa	102,943.91	498,476.00	-0-	453,028.83	148,391.08
Kansas	115,221.50	501,658.00	48,753.31	464,589.66	103,536.53
Kentucky	60,602.75	536,229.00	-0-	578,255.69	18,576.06
Louisiana	-0-	503,860.00	-0-	503,860.00	-0-
Maine	-0-	327,800.00	-0-	327,800.00	-0-
Maryland	43,671.28	327,800.00	-0-	334,779.98	36,691.30
Massachusetts	199,550.51	327,800.00	12,904.96	450,445.55	64,000.00
Michigan	540,375.43	1,242,445.00	-0-	1,633,154.00	149,666.43
Minnesota	283,801.30	1,260,520.00	-0-	1,528,479.89	15,841.41
Mississippi	173,915.60	439,022.00	-0-	612,937.60	-0-
Missouri	89,051.68	810,300.00	-0-	898,756.58	595.10
Montana	3,879.22	745,460.00	-0-	573,771.20	175,568.02
Nebraska	109,785.23	420,146.00	-0-	330,968.63	198,962.60
Nevada	73,762.14	509,497.00	-0-	568,923.66	14,335.48
New Hampshire	214.94	327,800.00	-0-	327,480.78	534.16
New Jersey	89,489.40	327,800.00	-0-	377,659.27	38,630.13
New Mexico	5,952.72	592,662.00	-0-	579,828.89	18,785.83
New York	48,226.62	775,646.00	-0-	816,238.50	7,634.12
North Carolina	49,621.43	493,992.00	-0-	527,401.69	16,211.74
North Dakota	275,092.51	358,959.00	-0-	383,730.80	250,320.71
Ohio	108,933.14	790,999.00	-0-	568,544.70	331,387.44
Oklahoma	145,305.13	629,121.00	-0-	657,537.26	116,888.87
Oregon	94,022.65	812,487.00	-0-	849,888.52	56,621.13
Pennsylvania	11,486.24	822,554.00	-0-	834,040.24	-0-
Rhode Island	91,408.08	327,800.00	-0-	251,736.00	167,472.08
South Carolina	101,127.25	395,013.00	-0-	496,140.25	-0-
South Dakota	-0-	385,421.00	-0-	385,421.00	-0-
Tennessee	18,090.54	583,759.00	-0-	592,292.14	9,557.40
Texas	1,047,018.02	1,639,000.00	-0-	1,618,684.53	1,067,333.49
Utah	37,343.15	564,748.00	-0-	581,874.61	20.216.54
Vermont	172,688.23	327,800.00	-0-	367,869.86	132,618.37
Virginia	358,661.51	501,719.00	-0-	638,192.39	222,188.12
Washington	76,138.37	828,781.00	-0-	633,478.49	271,440.88
West Virginia	-0-	327,800.00	-0-	327,534.54	265.46
Wisconsin	171,486.97	1,172,339.00	-0-	1,214,002.00	129,823.97
Wyoming	-0-	524,484.00	-0-	506,463.59	18,020.41
American Samoa	20,856.35	109,267.00	-0-	130,123.35	-0-
Guam	18,390.74	109,267.00	-0-	101,653.00	26,004.74
N. Mariana Islands	67,900.00	109,267.00	-0-	121,569.52	55,597.48
Puerto Rico	-0-	327,800.00	-0-	327,800.00	-0-
Virgin Islands	-0-	109,267.00	-0-	109,267.00	-0-
TOTAL	$ 5,782,446.17	$32,780,000.00	$ 76,051.68	$33,650,191.36	$ 4,836,203.13

* S.F.R.P. is Sport Fisheries Research Program of the U.S. Fish and Wildlife Service.

TABLE 2. WILDLIFE RESTORATION APPORTIONMENTS, OBLIGATIONS, REVERSIONS AND BALANCES
FISCAL YEAR 1983

State	Balance 10-01-82	Apportionment F.Y. 1983	Reversions to M.B.C.F.*	Net Project Obligations	Unobligated Balance 9/30/83
Alabama	$ 1,735,767.02	$ 1,943,852.00	$ 72,368.67	$ 2,776,672.70	$ 830,577.65
Alaska	189,550.00	4,600,200.00	-0-	4,789,750.00	-0-
Arizona	1,038,830.57	2,395,725.00	-0-	2,264,696.07	1,169,859.50
Arkansas	-0-	1,867,565.00	-0-	1,860,625.95	6,939.05
California	268,581.39	4,147,447.00	-0-	3,857,701.85	558,326.54
Colorado	8,999.69	2,628,293.00	-0-	2,637,292.69	-0-
Connecticut	-0-	805,235.00	-0-	802,392.31	2,842.69
Delaware	3,221.91	629,400.00	-0-	631,689.25	932.66
Florida	448,987.57	2,025,992.00	-0-	2,474,979.57	-0-
Georgia	61,248.20	2,360,158.00	-0-	2,404,038.63	17,367.57
Hawaii	526,275.00	629,400.00	42,511.67	558,439.33	554,724.00
Idaho	423,431.80	2,000,159.00	-0-	1,938,913.49	484,677.31
Illinois	477,394.44	2,179,659.00	1,893.41	2,539,627.35	115,532.68
Indiana	232,121.72	1,908,884.00	-0-	1,766,424.30	374,581.42
Iowa	69,500.64	1,881,711.00	231,876.64	1,710,870.96	8,464.04
Kansas	1,316,106.49	2,016,800.00	193,702.64	2,270,586.47	868,617.38
Kentucky	724,793.68	1,764,271.00	105,101.52	1,871,125.08	512,838.08
Louisiana	68,951.30	2,155,101.00	-0-	2,224,052.30	-0-
Maine	8,433.93	1,212,357.00	-0-	1,211,171.00	9,619.93
Maryland	20,289.92	1,061,777.00	-0-	1,082,059.46	7.46
Massachusetts	868,490.00	1,005,800.00	9,327.35	1,135,302.63	729,660.02
Michigan	714,040.66	4,193,899.00	-0-	3,898,150.00	1,009,789.66
Minnesota	169,673.03	2,951,643.00	-0-	3,096,255.96	25,060.07
Mississippi	-0-	1,689,569.00	-0-	1,622,479.52	67,089.48
Missouri	-0-	2,711,687.00	-0-	2,705,408.20	6,278.80
Montana	191,677.14	2,777,313.00	-0-	1,804,214.82	1,164,775.32
Nebraska	564,492.35	1,718,986.00	-0-	1,276,408.03	1,007,070.32
Nevada	328,901.45	1,859,280.00	-0-	1,686,206.72	501,974.73
New Hampshire	502,055.40	629,400.00	6,601.80	495,453.60	629,400.00
New Jersey	570,212.51	1,032,910.00	-0-	1,068,604.17	534,518.34
New Mexico	53.96	2,248,353.00	-0-	1,969,744.03	278,662.93
New York	1,379,384.24	3,164,669.00	-0-	2,498,274.44	2,045,778.80
North Carolina	-0-	2,152,975.00	-0-	1,977,717.93	175,257.07
North Dakota	1,179,354.31	1,414,641.00	-0-	1,629,019.35	964,975.96
Ohio	969,854.97	2,327,255.00	-0-	2,884,155.45	412,954.52
Oklahoma	1,012,477.73	2,112,308.00	-0-	2,418,193.59	706,592.14
Oregon	1,105,474.85	2,688,041.00	-0-	2,629,842.88	1,163,672.97
Pennsylvania	955,669.38	4,427,270.00	-0-	5,362,492.94	20,446.44
Rhode Island	527,612.52	629,400.00	-0-	713,820.00	443,192.52
South Carolina	538,686.50	1,341,326.00	-0-	1,636,506.50	243,506.00
South Dakota	-0-	1,660,642.00	-0-	1,627,754.04	32,887.96
Tennessee	769,335.30	2,555,400.00	-0-	2,758,394.64	566,340.66
Texas	3,395,937.69	4,976,600.00	19,365.93	5,548,756.64	2,804,415.12
Utah	-0-	1,963,633.00	-0-	1,963,633.00	-0-
Vermont	-0-	642,911.00	-0-	567,236.22	75,674.78
Virginia	2,118,107.76	2,237,646.00	-0-	2,731,566.32	1,624,187.44
Washington	[illegible]0,171.28	2,350,070.00	-0-	2,193,510.79	306,730.49
West Virginia	-0-	1,323,946.00	-0-	1,073,428.28	250,517.72
Wisconsin	524,634.21	3,159,733.00	-0-	3,406,894.82	277,472.39
Wyoming	1,594,816.97	2,016,307.00	-0-	2,577,976.50	1,033,147.47
Guam	-0-	147,067.00	-0-	42,438.58	104,628.42
N. Mariana Islands	107,133.00	147,067.00	-0-	234,555.51	19,644.49
Puerto Rico	-0-	441,200.00	-0-	441,200.00	-0-
Virgin Islands	-0-	147,067.00	-0-	147,067.00	-0-
TOTAL	$27,860,732.48	$107,060,000.00	$682,749.63	$109,495,771.86	$24,742,210.99

* M.B.C.F. is the Migratory Bird Conservation Fund of the U.S. Fish and Wildlife Service.

TABLE 3. LANDS ACQUIRED IN FEE TITLE
FISCAL YEAR 1983

State	Wildlife		Fish		Combination Fish and Wildlife		Totals	
	Acreage	Cost*	Acreage	Cost*	Acreage	Cost*	Acreage	Cost*
Alabama	5,144	$ 962,768	-	-	-	-	5,144	$ 962,768
Alaska	-	-	-	-	-	-	-	-
Arizona	-	-	-	-	-	-	-	-
Arkansas	58	20,625	880	$ 211,968	-	-	938	232,593
California	-	-	-	-	-	-	-	-
Colorado	-	-	-	-	-	-	-	-
Connecticut	93	1,605,600	-	-	416	$1,144,114	509	2,749,714
Delaware	-	-	-	-	489	748,084	489	748,084
Florida	2,303	1,382,525	-	-	-	-	2,303	1,382,525
Georgia	-	-	-	-	-	-	-	-
Hawaii	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-
Illinois	-	-	-	-	-	-	-	-
Indiana	-	-	-	-	140	74,514	140	74,514
Iowa	591	999,056	-	-	-	-	591	999,056
Kansas	-	-	-	-	-	-	-	-
Kentucky	2,531	953,450	-	-	-	-	2,531	953,450
Louisiana	-	-	-	-	-	-	-	-
Maine	27	240,405	-	-	-	-	27	240,405
Maryland	-	-	-	-	-	-	-	-
Massachusetts	162	79,409	-	-	126	36,250	288	115,659
Michigan	759	678,800	-	-	-	-	759	678,800
Minnesota	2,744	840,876	14	24,059	23	508,461	2,781	1,373,096
Mississippi	-	-	-	-	-	-	-	-
Missouri	4,410	4,252,000	-	-	5,520	4,271,590	9,930	8,523,590
Montana	881	134,750	-	-	-	-	881	134,750
Nebraska	1,053	613,731	-	-	479	236,336	1,532	850,067
Nevada	-	-	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-	-	-
New Jersey	-	-	-	-	-	-	-	-
New Mexico	-	-	-	-	-	-	-	-
New York	-	-	-	-	-	-	-	-
North Carolina	-	-	-	-	-	-	-	-
North Dakota	-	-	-	-	-	-	-	-
Ohio	486	335,585	-	-	-	-	486	335,585
Oklahoma	10	2,267	-	-	-	-	10	2,267
Oregon	-	-	-	-	-	-	-	-
Pennsylvania	669	803,256	-	-	-	-	669	803,256
Rhode Island	33	180,400	-	-	-	-	33	180,400
South Carolina	-	-	-	-	-	-	-	-
South Dakota	544	151,674	-	-	-	-	544	151,674
Tennessee	80	64,178	-	-	-	-	80	64,178
Texas	122	176,914	-	-	-	-	122	176,914
Utah	3,765	394,435	-	-	-	-	3,765	394,435
Vermont	98	64,500	-	-	-	-	98	64,500
Virginia	1,418	580,249	-	-	-	-	1,418	580,249
Washington	-	-	-	-	-	-	-	-
West Virginia	-	-	-	-	-	-	-	-
Wisconsin	1,136	649,334	234	135,350	-	-	1,370	784,684
Wyoming	4,986	955,000	-	-	-	-	4,986	955,000
American Samoa	-	-	-	-	-	-	-	-
Guam	-	-	-	-	-	-	-	-
Puerto Rico	-	-	-	-	-	-	-	-
Virgin Islands	-	-	-	-	-	-	-	-
TOTALS	34,103	$17,121,487	1,128	$371,377	7,193	$7,019,349	42,424	$24,512,213

* Federal-State combined cost of land purchased in fee title; does not include acquisition overhead costs.

TABLE 4. LANDS ACQUIRED IN FEE TITLE
FISCAL YEARS 1938 - 1983

State	Wildlife		Fish		Combination Fish and Wildlife		Totals	
	Acreage	Cost	Acreage	Cost	Acreage	Cost	Acreage	Cost
Alabama	29,773	$ 1,454,269	325	$ 68,249	5	$ 13,000	30,103	$ 1,535,518
Alaska	248	227,000	2	424	-	-	250	227,424
Arizona	13,758	550,803	-	-	526	556,013	14,284	1,106,816
Arkansas	198,945	11,160,100	3,612	1,552,889	-	-	202,557	12,712,989
California	67,154	964,344	-	-	-	-	67,154	964,344
Colorado	124,448	3,500,000	4,321	1,046,801	7,467	387,759	132,236	4,934,560
Connecticut	10,670	4,382,859	154	35,483	416	1,144,114	11,240	5,562,456
Delaware	7,150	466,449	236	87,320	617	820,584	8,003	1,374,353
Florida	113,200	4,152,537	-	-	-	-	113,200	4,152,537
Georgia	29,655	1,757,578	386	269,000	-	-	30,041	2,026,578
Hawaii	-	-	-	-	-	-	-	-
Idaho	55,934	2,240,738	1,412	137,303	634	16,072	57,980	2,394,113
Illinois	32,902	3,879,536	577	479,317	-	-	33,479	4,358,853
Indiana	20,955	3,390,737	552	169,804	34,299	6,721,542	55,806	10,282,083
Iowa	39,553	6,499,095	6,140	941,238	6,081	636,506	51,774	8,076,839
Kansas	47,570	3,114,874	757	79,943	2,138	300,000	50,465	3,494,817
Kentucky	36,935	7,025,792	44	13,700	2	10,875	36,981	7,050,367
Louisiana	-	-	-	-	-	-	-	-
Maine	15,109	524,387	-	-	-	-	15,109	524,387
Maryland	60,858	1,198,498	246	45,457	-	-	61,104	1,243,955
Massachusetts	12,322	945,430	1,954	424,546	1,867	477,917	16,143	1,847,893
Michigan	190,627	14,800,169	2,192	748,150	-	-	192,819	15,548,319
Minnesota	344,216	21,461,880	5,303	827,409	398	1,708,582	349,917	23,997,871
Mississippi	24,316	3,640,343	6	5,200	9,814	2,204,005	34,196	5,849,548
Missouri	107,711	19,626,751	5,888	501,905	10,463	5,835,590	124,062	25,964,246
Montana	92,693	4,460,903	4,218	164,814	-	-	96,911	4,625,717
Nebraska	22,256	3,081,566	707	77,180	7,438	1,639,934	30,401	4,798,680
Nevada	34,372	1,276,517	1,393	247,143	462	-	36,227	1,523,660
New Hampshire	6,348	914,397	149	110,625	2,291	157,701	8,788	1,182,723
New Jersey	26,873	506,815	763	255,973	6,693	1,333,333	34,329	2,096,121
New Mexico	211,917	3,926,139	355	305,900	34,459	3,472,761	246,731	7,704,800
New York	25,231	816,215	-	-	-	-	25,231	816,215
North Carolina	51,403	1,038,037	20	8,604	-	-	51,423	1,046,641
North Dakota	36,918	1,538,213	3,571	413,739	2,109	103,842	42,598	2,055,794
Ohio	58,165	10,066,811	2,921	624,236	603	147,970	61,689	10,839,017
Oklahoma	72,145	1,324,727	1,169	73,356	2,766	208,143	76,080	1,606,226
Oregon	*85,183	5,425,114	3,453	665,169	-	-	88,636	6,090,283
Pennsylvania	175,396	3,733,578	6,185	883,161	-	-	181,581	4,616,739
Rhode Island	6,042	1,449,111	474	2/2,727	1,819	110,225	8,335	1,832,063
South Carolina	24,460	281,992	-	-	4,768	132,167	29,228	414,159
South Dakota	67,610	2,816,626	3,119	590,724	101	10,104	70,830	3,417,454
Tennessee	119,637	1,661,135	1,985	1,282,523	-	-	121,622	2,943,658
Texas	163,859	5,510,116	5	15,000	-	-	163,864	5,525,116
Utah	223,162	5,785,093	1,215	503,750	5,003	77,967	229,380	6,366,810
Vermont	20,553	1,561,417	486	217,876	158	4,938	21,197	1,784,231
Virginia	59,519	9,044,362	55	4,464	15,940	527,559	75,514	9,576,385
Washington	**154,223	2,422,862	**2,441	706,788	-	-	156,664	3,129,650
West Virginia	29,967	195,473	22	16,000	-	-	29,989	211,473
Wisconsin	248,271	21,789,579	44,372	8,630,972	7,445	409,106	300,088	30,829,657
Wyoming	176,169	6,144,555	2,135	159,732	275	10,582	178,579	6,314,869
American Samoa	-	-	-	-	-	-	-	-
Guam	-	-	-	-	-	-	-	-
Puerto Rico	-	-	-	-	-	-	-	-
Virgin Islands	-	-	-	-	-	-	-	-
TOTALS	3,776,381	$213,735,522	115,320	$23,644,594	166,987	$29,178,891	4,058,688	$266,579,007

* Acquired by exchange of land; only difference in acreage and value shown.
** Acquired by exchange of land; only difference in acreage and value shown.

TABLE 5. ACCESS TO PUBLIC HUNTING AND FISHING GROUNDS
FISCAL YEAR 1983

State	Number of Sites Acquired	Number of Sites Developed	Acreage Acquired	Total Costs Acquisition	Total Costs Development	Area Available for Public Use Fishing Stream (Miles)	Area Available for Public Use Fishing Open (Acreage)	Area Available for Public Use Hunting Acreage
Wildlife								
Illinois	-	7	-	-	$ 5,600	-	-	2,000
Iowa	-	1	-	-	1,000	-	-	113
Total	-	8	-	-	$ 6,600	-	-	2,113
Fisheries								
Arkansas	-	2	-	-	$ 27,000	10	-	-
Indiana	-	7	-	-	102,000	10	202	-
Iowa	-	3	-	-	207,000	-	640	-
Michigan*	-	3	-	-	146,500	-	642	-
Minnesota**	27	-	195	$ 233,379	-	15	-	-
New Jersey	-	2	-	-	446,000	2	2,350	-
North Dakota	-	35	-	-	80,000	-	10,395	-
Ohio*	-	3	-	-	896,572	-	100	-
Rhode Island	-	2	-	-	5,000	-	3,090	-
Wisconsin**	15	-	524	383,561	-	5.7	-	-
Total	42	57	719	$ 616,940	$1,910,072	42.7	17,419	-
Combination Fish and Wildlife								
Minnesota	12	10	23	$ 408,461	$ 279,903	10	14,281	-
Missouri	-	6	-	-	672,061	60	-	-
Virginia	-	2	-	-	9,000	-	-	16
Total	12	18	23	$ 408,461	$ 960,964	70	14,281	16
GRAND TOTALS	54	83	742	$1,025,401	$2,877,636	112.7	31,700	2,129

* Includes fishing pier developments.
** Includes trout stream access acquisition projects.

TABLE 6. ACCESS TO PUBLIC HUNTING AND FISHING GROUNDS
FISCAL YEARS 1938 - 1983

Fish State	Number of Sites Acquired	Number of Sites Developed	Acreage Acquired	Total Costs Acquisition	Total Costs Development	Area Available for Public Use Hunting Acres	Area Available for Public Use Fishing Acres	Area Available for Public Use Fishing Miles
Alabama	-	126	-	$ -	$ 903,611	-	82,101	35.0
Alaska	2	80	1	80	43,711	-	19,184	-
Arkansas	3	56	10	-	903,499	9	51,292	135.0
California	-	5	-	-	1,395	-	-	2.0
Colorado	5	12	4,812	708,800	83,222	-	3,271	6.3
Connecticut	22	81	211	294,118	643,972	-	8,320	8.2
Delaware	4	63	58	50,000	728,017	550	28,060	10.0
Florida	-	134	-	-	295,648	-	350	45.0
Georgia	-	3	-	-	4,451	-	-	-
Hawaii	-	5	-	-	500	-	-	-
Idaho	45	36	634	66,080	186,929	2,770	30,502	36.6
Illinois	-	6	-	-	1,042,000	2,557	4,487	5.0
Indiana	56	103	204	129,550	623,840	10	12,855	140.0
Iowa	121	24	1,310	450,019	303,063	5,596	23,090	88.5
Kansas	-	25	-	-	220,176	-	229	-
Kentucky	1	1	2	1,700	1,070	-	68	-
Massachusetts	9	14	942	181,696	111,120	80	2,130	24.4
Michigan	195	4	1,215	705,502	150,477	-	131,456	157.5
Minnesota	44	43	245	357,981	60,271	10,015	36,038	41.0
Mississippi	1	2	6	5,200	6,000	-	2,234	-
Missouri	12	34	97	59,706	765,719	260	2,472	288.0
Montana	22	-	3,686	64,697	-	-	6,930	24.3
Nebraska	2	6	48	20,245	23,670	8	435	.3
Nevada	-	10	-	-	59,303	-	-	-
New Hampshire	12	32	149	110,625	123,511	-	1,805	57.9
New Jersey	5	3	320	191,577	565,900	-	2,350	2.0
New Mexico	12	5	351	178,000	47,470	-	2,214	8.0
New York	-	20	-	-	7,000	-	-	40.0
North Carolina	1	13	20	8,604	101,087	-	5,560	33.0
North Dakota	2	35	57	1,873	80,000	292	10,687	-
Ohio	1	33	25	14,000	1,430,216	205	2,022	3.0
Oklahoma	3	4	402	15,500	9,903	-	235	1.0
Oregon	77	67	3,529	718,805	420,505	-	106,688	233.8
Pennsylvania	-	43	-	-	1,196,074	2,188	2,865	694.0
Rhode Island	28	95	481	251,352	308,385	1,810	18,401	31.0
South Dakota	37	5	1,965	329,326	20,230	12,575	37,300	21.5
Tennessee	-	186	-	-	702,958	-	25,940	10.0
Texas	1	-	5	15,000	37,958	-	73,772	-
Utah	2	-	55	66,000	-	-	166	-
Vermont	76	99	308	69,148	338,262	-	19,900	10.0
Virginia	5	8	23	38,094	67,000	-	93	112.0
Washington	53	17	1,147	199,294	93,997	-	8,906	24.0
West Virginia	4	-	22	16,000	-	-	-	.6
Wisconsin	49	-	1,101	681,606	-	4,136	42,956	31.6
Wyoming	49	101	2,873	634,859	356,948	-	2,362	83.2
Total	961	1,639	26,314	$ 6,635,037	$ 13,069,068	43,061	809,726	2,443.7

TABLE 6. GRAND TOTALS
FISCAL YEARS 1938 - 1983

Grand Totals	1,323	2,796	85,053	$ 8,585,064	$ 17,889,980	277,271	970,482	3,055.7

TABLE 6. (CONT.)
FISCAL YEARS 1938 - 1983

Wildlife

State	Number of Sites Acquired	Number of Sites Developed	Acreage Acquired	Total Costs Acquisition	Total Costs Development	Area Available for Public Use Hunting Acres	Area Available for Public Use Fishing Acres	Area Available for Public Use Fishing Miles
Alaska	-	2	-	$ -	$ 11,892	-	-	-
Arizona	-	22	-	-	59,081	-	-	-
Arkansas	-	24	-	-	94,295	-	-	-
California	1	13	5	447	118,391	52,640	60	3.0
Colorado	1	25	775	23,000	42,861	775	-	-
Delaware	-	4	-	-	55,029	1,043	-	-
Hawaii	-	17	-	-	27,439	-	-	-
Idaho	23	58	1,034	66,738	114,964	52,980	2,400	178.8
Illinois	1	27	4,517	72,090	56,162	5,135	-	5.0
Iowa	7	1	1,190	13,564	2,360	1,748	472	6.0
Kansas	-	9	-	-	72,868	10,984	-	-
Maine	1	4	5	500	4,834	1,000	235	-
Massachusetts	-	7	-	-	11,048	-	-	-
Michigan	2	-	125	46,730	-	14,000	7,000	-
Minnesota	53	36	2,509	81,768	171,680	14,799	-	-
Missouri	1	78	217	8,823	51,382	1,635	-	-
Montana	1	6	10	5,650	5,492	6,049	-	-
Nebraska	2	3	126	35,600	287,550	1,318	37	12.0
Nevada	-	1	-	-	2,024	-	-	-
New Hampshire	2	4	112	29,824	35,856	1,030	1,000	-
New Jersey	-	1	-	-	29,600	-	-	-
New Mexico	-	5	-	-	20,178	-	-	-
New York	-	75	-	-	98,715	-	-	-
North Dakota	3	-	88	2,090	-	1,522	400	-
Oklahoma	1	4	157	1,567	5,200	157	-	-
Oregon	-	37	-	-	27,825	-	-	-
Pennsylvania	-	130	-	-	356,980	-	-	-
Rhode Island	-	11	-	-	20,226	-	-	-
South Dakota	1	-	160	1,280	-	-	-	7.0
Texas	-	5	-	-	23,391	7,000	1,500	5.0
Utah	-	60	-	-	124,148	-	-	-
Washington	1	10	33,773	16,587	31,967	16,560	800	-
West Virginia	-	16	-	-	17,400	-	-	-
Wisconsin	6	48	5,676	6,071	42,970	-	-	15.0
Wyoming	4	2	56	7,157	42,200	6,454	-	-
Total	111	745	50,535	$ 419,486	$ 2,066,008	196,829	13,904	231.8

Combination Fish and Wildlife

Alabama	1	-	5	$ 13,000	$ -	3,000	3,000	10.0
Connecticut	-	1	-	-	14,250	-	-	-
Delaware	2	-	106	51,250	-	1,000	3,000	10.0
Indiana	1	34	18	15,900	492,931	601	13,653	97.0
Iowa	2	23	412	80,783	694,834	15,762	526	23.0
Minnesota	162	315	359	1,031,449	624,974	13,992	107,557	83.0
Missouri	-	6	-	-	672,061	-	14,281	10.0
Nebraska	5	-	375	103,354	-	928	992	12.0
New Hampshire	-	3	-	-	34,213	-	-	-
New Mexico	1	-	847	12,420	-	847	-	3.0
Oklahoma	1	-	923	110,640	2,100	923	-	1.0
Rhode Island	4	-	257	63,827	-	81	3,843	.2
Utah	65	4	49	2,730	15,681	247	-	-
Vermont	-	15	-	-	50,000	-	-	-
Virginia	5	10	23	38,094	76,000	-	-	128.0
Wyoming	2	1	4,830	7,094	77,860	-	-	3.0
Total	251	412	8,204	$ 1,530,541	$2,754,904	37,381	146,852	380.2

TABLE 7. WILDLIFE MANAGEMENT AREAS AND WILDLIFE REFUGES ACQUIRED, DEVELOPED OR MANAGED AS OF SEPTEMBER 30, 1983

State	Number Of Areas	Total Acreage	Hunting Acreage Water	Hunting Acreage Land	Total Hunting Acreage	Total Refuge Acreage
Alabama	30	701,155	12,287	681,748	694,035	7,120
Alaska	2	249	-	-	-	249
Arizona	19	68,313	440	67,873	68,313	-
Arkansas	40	1,632,964	7,167	1,612,312	1,619,479	13,485
California	12	109,987	26,254	75,967	102,221	7,766
Colorado	55	204,305	2,559	200,584	203,143	1,000
Connecticut	58	226,604	6,245	202,604	208,849	17,755
Delaware	17	29,784	6,943	21,356	28,299	1,485
Florida	49	4,701,759	151,158	4,535,601	4,686,759	12,000
Georgia	48	978,749	12,000	966,749	978,049	700
Hawaii	9	430,800	-	430,800	430,800	-
Idaho	19	98,035	2,500	94,600	97,100	935
Illinois	52	459,159	23,990	415,364	438,348	20,811
Indiana	20	63,479	4,600	54,109	58,709	4,770
Iowa	240	193,148	49,170	129,807	178,977	14,171
Kansas	37	231,329	50,415	161,729	212,144	19,185
Kentucky	28	645,489	106,268	413,049	519,317	126,172
Louisiana	32	712,577	21,147	687,930	709,077	3,500
Maine	64	6,036,502	19,373	6,015,860	6,035,233	1,269
Maryland	45	199,908	4,300	192,262	196,562	3,346
Massachusetts	44	51,391	7,963	43,428	51,391	-
Michigan	89	349,053	63,148	276,608	339,756	9,297
Minnesota	961	970,701	47,096	862,248	909,344	61,357
Mississippi	31	1,025,192	80,045	930,477	1,010,492	14,700
Missouri	76	1,570,482	1,779	1,559,435	1,561,214	9,268
Montana	33	123,779	10,188	112,256	122,444	1,335
Nebraska	83	157,912	75,502	80,708	156,110	1,702
Nevada	11	248,879	43,879	205,000	248,879	-
New Hampshire	33	10,897	2,229	8,062	10,291	606
New Jersey	45	275,137	105,500	154,402	259,902	15,235
New Mexico	26	261,560	224	255,201	255,425	6,135
New York	658	269,698	29,019	218,085	247,104	22,594
North Carolina	79	2,001,785	7,235	2,002,630	1,991,550	3,000
North Dakota	112	117,492	34,204	79,472	113,676	3,816
Ohio	59	260,184	23,910	226,992	250,902	9,282
Oklahoma	29	366,665	3,967	320,107	320,065	42,600
Oregon	12	85,256	6,622	69,057	95,679	9,577
Pennsylvania	451	3,345,449	6,617	3,326,403	3,333,020	12,429
Rhode Island	20	33,008	1,586	29,207	30,793	2,215
South Carolina	9	1,522,534	90,591	1,431,067	1,521,658	876
South Dakota	88	905,501	92,688	802,028	894,716	10,785
Tennessee	46	1,081,755	32,291	1,037,654	1,069,945	11,810
Texas	20	278,453	11,960	262,264	274,224	4,229
Utah	57	441,670	44,082	394,022	438,104	3,566
Vermont	69	113,048	5,214	105,883	111,097	1,951
Virginia	51	2,195,090	549	2,178,462	2,179,021	16,069
Washington	27	606,229	1,547	604,362	605,909	320
West Virginia	32	773,672	3,469	770,089	773,558	144
Wisconsin	179	502,985	16,237	470,917	487,154	15,831
Wyoming	34	229,278	6,050	221,659	227,709	1,569
American Samoa	-	-	-	-	-	-
Guam	-	-	-	-	-	-
Puerto Rico	3	14,128	490	13,416	13,906	222
Virgin Islands	-	-	-	-	-	-
Totals	4,343	37,913,158	1,362,697	36,011,875	37,348,452	548,239

TABLE 8. EXPENDITURES AND OBLIGATIONS FOR WATERFOWL
FISCAL YEAR 1983

State	Acreage	Activities and Costs* Land	Development	Research	Total
Alabama	-	$ -	$ 194,350	$ 40,500	$ 234,850
Alaska	-	-	-	77,000	77,000
Arizona	-	-	90,712	58,925	149,637
Arkansas	-	-	433,850	30,900	464,750
California	-	-	2,224,002	129,171	2,353,173
Colorado	-	-	81,411	145,575	226,986
Connecticut	-	-	-	93,022	93,022
Delaware	-	-	180,000	26,680	206,680
Florida	-	-	69,680	51,000	120,680
Georgia	-	-	85,210	73,600	158,810
Hawaii	-	-	14,741	-	14,741
Idaho	-	-	505,565	25,472	531,037
Illinois	-	-	452,000	170,007	622,007
Indiana	140	55,886	467,000	18,066	540,952
Iowa	225	272,625	600,000	31,740	904,365
Kansas	-	-	442,500	88,500	531,000
Kentucky	-	-	218,360	92,000	310,360
Louisiana	-	-	185,520	177,600	363,120
Maine	5	35,925	163,338	271,546	470,809
Maryland	-	-	203,511	99,525	303,036
Massachusetts	117	19,500	57,000	101,280	177,780
Michigan	573	332,738	115,500	-	448,238
Minnesota	1,622	460,252	420,000	-	880,252
Mississippi	-	-	165,380	35,300	200,680
Missouri	3,112	2,163,584	-	83,200	2,246,784
Montana	781	46,000	-	70,000	116,000
Nebraska	768	375,173	208,620	91,950	675,743
Nevada	-	-	840,895	76,152	917,047
New Hampshire	-	-	-	34,890	34,890
New Jersey	-	-	87,000	71,402	158,402
New Mexico	-	-	222,182	28,256	250,438
New York	-	-	91,566	96,911	188,477
North Carolina	-	-	124,075	29,000	153,075
North Dakota	-	-	360,000	60,825	420,825
Ohio	178	96,203	387,000	73,969	557,172
Oklahoma	-	-	446,787	150,129	596,916
Oregon	-	-	742,191	-	742,191
Pennsylvania	-	-	500,300	-	500,300
Rhode Island	-	-	29,808	10,905	40,713
South Carolina	-	-	295,835	-	295,835
South Dakota	72	16,250	432,216	54,000	502,466
Tennessee	-	-	383,465	49,100	432,565
Texas	-	-	49,583	195,000	244,583
Utah	-	-	284,858	71,392	356,250
Vermont	1,111	43,773	39,000	92,595	175,368
Virginia	-	-	210,609	19,200	229,809
Washington	-	-	279,267	81,176	360,143
West Virginia	-	-	59,250	8,430	67,680
Wisconsin	576	256,742	117,000	127,409	501,151
Wyoming	-	-	99,670	206,008	305.678
American Samoa	-	-	-	-	-
Guam	-	-	-	-	-
Puerto Rico	-	-	50,770	-	50,770
Virgin Islands	-	-	-	7,500	7,500
Total	9,280	$ 4,174,651	$ 13,711,577	$ 3,626,808	$ 21,513,036

* Funds shown are Federal share only.

TABLE 8. (CONT.) EXPENDITURES AND OBLIGATIONS FOR WATERFOWL
FISCAL YEARS 1938 - 1983

State	Acreage	Activities and Costs* Land	Development	Research	Total
Alabama	16,336	$ 64,164	$ 2,542,354	$ 567,983	$ 3,174,501
Alaska	248	119,175	-	1,205,489	1,324,664
Arizona	2,826	294,234	1,731,970	558,091	2,584,295
Arkansas	37,948	1,982,535	4,306,024	405,951	6,694,510
California	6,550	304,173	25,841,407	3,008,644	29,154,224
Colorado	15,236	596,885	1,116,095	1,937,345	3,650,325
Connecticut	9,381	1,983,027	442,989	416,277	2,842,293
Delaware	7,499	727,531	1,881,612	391,463	3,000,606
Florida	53,133	9,962	1,159,950	1,061,031	2,230,943
Georgia	25,611	134,041	2,058,339	474,841	2,667,221
Hawaii	-	-	46,508	432,994	479,502
Idaho	18,389	816,450	4,716,269	361,206	5,893,925
Illinois	25,784	1,489,806	9,017,686	948,956	11,456,448
Indiana	47,169	2,393,375	4,126,493	273,812	6,793,680
Iowa	32,615	2,784,969	8,355,299	422,909	11,563,177
Kansas	39,773	1,217,608	7,054,106	502,033	8,773,747
Kentucky	13,287	531,850	3,655,436	624,312	4,816,598
Louisiana	-	-	2,674,207	1,373,583	4,047,790
Maine	12,141	207,165	2,336,746	1,587,929	4,131,840
Maryland	45,205	390,858	2,250,931	798,151	3,439,940
Massachusetts	4,968	38,328	587,080	1,049,701	1,675,109
Michigan	85,071	4,576,596	7,421,377	113,249	12,111,222
Minnesota	319,775	10,700,904	7,039,838	209,447	17,950,189
Mississippi	15,592	245,473	2,806,431	542,652	3,594,556
Missouri	34,345	6,576,222	4,141,182	1,497,718	12,215,122
Montana	19,524	439,019	2,971,249	929,816	4,340,084
Nebraska	8,545	945,588	3,265,186	1,041,883	5,252,657
Nevada	69,797	954,274	8,022,281	647,226	9,623,781
New Hampshire	3,101	217,862	698,485	350,124	1.266,471
New Jersey	21,542	1,079,842	776,984	1,030,640	2,887,466
New Mexico	** 8,315	** 1,599,924	3,061,402	796,290	5,457,616
New York	29,128	3,334,651	6,591,163	1,609,588	11,535,402
North Carolina	21,196	22,428	1,430,659	654,571	2,107,658
North Dakota	28,402	316,440	2,412,483	593,112	3,322,035
Ohio	41,389	2,861,193	4,007,109	1,334,120	8,202,422
Oklahoma	6,309	22,207	2,103,101	1,122,758	3,248,066
Oregon	19,689	894,142	7,755,715	89,955	8,739,812
Pennsylvania	10,596	693,277	3,866,330	38,372	4,597,979
Rhode Island	3,126	582,967	723,422	394,498	1,700,887
South Carolina	18,479	173,884	3,780,797	115,200	4,069,881
South Dakota	52,355	878,680	3,246,878	961,504	5,087,062
Tennessee	3,187	72,428	6,092,825	557,452	6,722,705
Texas	10,912	441,236	2,187,772	2,003,512	4,632,520
Utah	18,185	232,346	4,228,723	1,384,095	5,845,164
Vermont	7,001	355,319	1,121,265	1,192,598	2,669,182
Virginia	12,398	129,751	1,897,872	529,065	2,556,688
Washington	20,196	330,939	3,982,313	968,838	5,282,090
West Virginia	-	-	878,308	258,427	1,136,735
Wisconsin	268,052	7,530,156	1,997,535	1,361,234	10,888,925
Wyoming	3,096	109,732	1,279,888	845,603	2,235,223
American Samoa	-	-	-	-	-
Guam	-	-	-	-	-
Puerto Rico	-	-	119,770	-	119,770
Virgin Islands	-	-	-	14,400	14,400
Total	1,573,402	$ 57,403,616	$ 185,809,844	$ 41,590,648	$ 284,804,108

* Funds shown are Federal share only.
** Recalculated removing approximately 90,000 acres and $10,000 entered in 1974.

TABLE 9. FISHING LAKES CONSTRUCTED OR RESTORED
FISCAL YEAR 1983

Fish

State	Number of Lakes	Total Cost	Fish (Federal) Share	SURFACE ACREAGE	
				New	Restored
Arkansas	1	$ 1,458,560	$ 1,093,920	800	-
Mississippi	1	253,000	189,750	-	512
Texas	1	510,000	95,625	-	1,200
Total	3	$ 2,221,560	$ 1,379,295	800	1,712

TABLE 10. FISHING LAKES CONSTRUCTED OR RESTORED
FISCAL YEARS 1951 - 1983

Fish

State	Number of Lakes	Total Cost	Fish (Federal) Share	SURFACE ACREAGE	
				New	Restored
Alabama	9	$ 876,533	$ 657,399	1,171	85
Arizona	9	1,702,948	439,328	635	-
Arkansas	13	2,999,987	2,126,364	5,556	1,252
Colorado	15	1,894,272	721,027	1,319	30
Connecticut	2	46,292	34,725	199	-
Delaware	5	115,527	86,664	156	16
Florida	1	108,526	54,263	350	-
Georgia	1	18,537	13,903	-	660
Idaho	2	154,213	104,204	113	-
Illinois	15	5,627,045	3,965,592	2,188	-
Indiana	1	180,000	135,000	-	1,500
Iowa	2	384,994	288,295	173	-
Kansas	13	1,466,540	1,042,117	1,030	3
Kentucky	7	316,318	237,238	1,274	-
Maryland	13	514,901	376,207	129	113
Mississippi	1	253,000	189,750	-	512
Missouri	5	557,344	320,816	473	-
Montana	1	42,667	4,846	20	-
Nebraska	9	196,256	146,833	49	55
Nevada	4	298,445	195,651	53	60
New Hampshire	1	9,210	4,605	60	-
New Jersey	9	496,096	282,254	455	116
New Mexico	12	886,097	569,866	307	37
New York	1	9,532	4,766	15	-
North Dakota	7	433,290	216,645	944	432
Ohio	12	2,109,891	1,628,602	852	54
Oklahoma*	7	817,143	540,121	300	247
Oregon	3	237,441	171,968	76	45
Pennsylvania	21	2,727,162	2,041,517	1,651	972
Rhode Island	3	14,544	10,908	11	3
South Carolina	4	171,257	128,443	180	-
South Dakota	8	574,542	430,216	625	19
Tennessee	4	606,538	454,903	397	47
Utah	7	467,128	367,953	343	636
Vermont	4	114,639	85,997	35	708
Virginia	9	1,456,990	1,092,743	992	82
Washington	11	105,219	78,914	89	25
West Virginia	3	157,348	78,674	200	3
Wisconsin	12	96,031	64,296	-	18
Wyoming	6	147,499	109,457	416	25
Guam	1	89,000	89,000	-	2
Total	273	$ 29,480,945	$ 19,592,070	22,836	7,757

* Several corrections have been made from previous reports.

TABLE 10. FISHING LAKES CONSTRUCTED OR RESTORED
FISCAL YEARS 1951 - 1983

Combination Fish and Wildlife

State	Number of Lakes	Total Cost	Fish (Federal) Share	Wildlife (Federal) Share	SURFACE ACREAGE New	SURFACE ACREAGE Restored
Arizona	7	$ 754,866	$ 265,215	$ 92,639	570	-
Arkansas	1	133,600	106,880	26,720	725	-
Colorado	1	216,902	121,957	40,669	-	1,100
Indiana	25	1,482,906	600,651	493,463	1,709	1,803
Iowa	9	282,681	102,357	109,654	356	4
Kansas	1	164,007	49,833	33,222	111	-
Maryland	1	23,874	17,905	-	23	-
Michigan	2	44,174	12,820	17,872	826	61
Mississippi	3	189,476	127,896	14,211	485	-
Nebraska	1	250,314	162,436	25,299	130	-
New Hampshire	1	16,900	3,169	9,506	60	-
New Jersey	1	85,000	42,500	42,500	80	-
New Mexico	1	487,019	153,502	153,502	175	-
New York	1	102,497	18,750	57,123	2,000	-
North Dakota	3	159,133	62,808	29,056	330	432
Oklahoma*	11	1,326,110	700,904	267,108	1,343	330
South Carolina	4	348,988	117,793	56,701	533	83
South Dakota	1	111,101	74,921	5,400	168	-
Texas	1	510,000	95,625	286,875	-	1,200
Vermont	1	40,245	30,184	-	8	-
Wisconsin	1	246,395	110,878	73,918	455	-
Total	77	$ 6,976,188	$ 2,978,984	$ 1,835,438	10,087	5,013

* Several corrections have been made from previous reports.

Fish and Combination Fish and Wildlife

GRAND TOTAL	350	$36,457,133	$22,571,054	$ 1,835,438	32,923	12,770

TABLE 11. PROJECT SEGMENTS STARTED DURING FISCAL YEAR 1983

Letters used in project identification indicate D-J (F-Fish), P-R (W-Wildlife), combination D-J and P-R (FW-Fish and Wildlife), coordination (C), development (D), land acquisition (L), investigation (R), and hunter safety (H) or (HS). The numbers further identify projects for administrative purposes. The proportionate share of funds for combination projects is indicated by percentages for D-J and P-R given in project descriptions. Funds shown are the total State and Federal approved costs.

Number	Description	Funds
	ALABAMA	
FW-3-23	Cooperative Statistical Project. To develop statistical methods of design and application for specified problems involving fish and wildlife; and to provide consultation to cooperating states.	$ 12,388.00
F-18-20	Cooperative Fish Disease and Parasite Study. To conduct research; to identify fish parasites and diseases in the cooperating states; to devise control measures; and to train State personnel in the identification and control of fish parasites and diseases.	8,000.00
F-35-10	Culture of Fish for Public Waters. To produce fish for stocking in Alabama's public waters.	180,000.00
F-37-10	Technical Guidance to Pond and Lake Owners. To provide technical guidance on fisheries management to pond owners.	170,000.00
F-38-10	Survey, Inventory, and Management of Alabama's Fishery Resources. To monitor fish populations; investigate fish kills; survey fishery habitat; and determine fishing pressure and harvest in public waters.	293,000.00
F-39-10	Fish Management Coordination. To plan, administer, and coordinate Alabama's fish restoration program.	105,000.00
F-40-10	Investigation of Management Techniques for Public Fishing Waters. To evaluate the interaction of gizzard shad and largemouth bass in ponds.	20,000.00
F-41-10	State Lakes Management. To manage intensively 17 State lakes to increase fish production and harvest.	220,000.00
F-42-6	Southeastern Cooperative Fishery Continuing Education Project. To provide continuing education for fishery biologists and administrators in cooperating States.	2,400.00
W-8-41	Wildlife Management Coordination. To plan, administer, and coordinate Alabama's wildlife restoration program.	200,000.00
W-34-30	Alabama Wildlife Development and Operations. To develop and maintain capital improvements; to control public use on wildlife management areas.	2,019,587.00
W-35-30	Statewide Wildlife Investigations. To conduct Statewide wildlife research and survey activities on waterfowl and woodcock.	193,851.00
W-39-27	Southeastern Cooperative Wildlife Disease Study. To determine the cause of wildlife diseases; and to devise control measures.	7,000.00
W-44-8	Cooperative Wildlife Project. To conduct research and survey activities on wild turkey, woodcock, fur reseouces, and mourning doves under an agreement with the Cooperative Wildlife Research Unit at Auburn University.	101,728.00

Number	Description	Funds
W-46-2	Research in Wildlife Management. To determine ecological parameters of the coyote, food habits, spatial relationships with foxes, and any interferences of fox hunting in West Alabama and East Mississippi.	$ 17,000.00
W-47-2	Skyline Wildlife Management Area Land Acquisition. To acquire a 520-acre addition to the management area.	72,000.00
H-1-11	Hunter Safety Education. To conduct a comprehensive statewide Hunter Education Program.	93,204.00
	D-J Total	$ 1,002,529.00
	P-R Total	2,712,629.00
	Grand Total	$ 3,715,158.00

ALASKA

F-9-15	Sport Fish Investigations of Alaska. To provide inventories and cataloging of sport fish waters in Alaska; life history studies of sheefish and whitefish, land use effects on sport fisheries, lake and stream investigations on salmon and trout populations with emphasis on distribution migrations, mortality factors, and statewide harvests.	$ 1,320,600.00
W-18-HS-12	Hunter Safety. To develop, coordinate, and maintain a statewide voluntary Hunter Safety Program involving eight hours of training for approximately 1,500 students.	96,000.00
W-22-2	Alaska Wildlife Research and Management. Surveys and inventories necessary for determining population distribution, harvests, and changes in species composition for 14 big game species, waterfowl, small game and furbearers. Research designed for answering specific management problems on ten of the big game animals, including caribou/pipeline effects, moose productivity and mortality factors, grizzly/wolf predation on moose, dynamics of dall sheep populations, life history studies on marten and river otter, habitat studies on mountain goats, moose, muskox, and evaluation of enzootic diseases in Alaskan wildlife. In addition the project provides administrative coordination, statewide planning, statistical services, and laboratory services to ongoing Federal Aid activities.	5,043,300.00
	D-J Total	$ 1,320,600.00
	P-R Total	5,139,300.00
	Grand Total	$ 6,459,900.00

ARIZONA

FW-11-R-16	Planning and Evaluation Project. To develop comprehensive plans; to incorporate fish and wildlife features in land and water projects. (35% D-J; 65% P-R)	441,200.00
FW-15-C-43	Fish and Wildlife Management Coordination. To supervise, administer, coordinate and provide other support services for the Arizona Federal Aid in Fish and Wildlife Restoration Programs. (20% D-J; 80% P-R)	172,800.00
FW-20-D-9	Habitat Development and Maintenance Project. To construct rainwater catchments and fence; to remove submergent vegetation; to improve watering sites and older catchments; to provide maintenance on all P-R and D-J developments. (17% D-J; 83% P-R)	930,000.00

Number	Description	Funds
F-7-R-26	Statewide Fisheries Investigations. To enhance fishery resources of Arizona by surveying parameters which affect fish production and yield; and to gather water quality and biological data to assist in fisheries management.	$ 579,800.00
F-14-R-18	Statewide Fisheries Research. To determine biological impact of fluctuating water levels on the fishery of the Colorado River from Glen Canyon dam to the mouth of the Paria River; to develop standard procedures for hydroacoustic surveys of striped bass and threadfin shad; and to determine the predator-prey relationship between striped bass and threadfin shad in Lake Mead, and define those factors contributing to the decline in the condition of Lake Mead striped bass.	134,400.00
W-53-R-34	Game Management Survey. To develop publication on the historical occurrences and status of wildlife in Arizona and for publications resulting from project activities; to develop game harvest recommendations and inform the public of hunting opportunities in Arizona; to determine discreteness of elk herds within specific game management units; to analyze band recoveries to determine migration patterns and population discreteness of mourning dove, white-winged dove, bandtailed pigeons, and waterfowl populations in Arizona; to determine distribution, relative abundance, population, and harvest trends of mammalian predator and furbearer species; to determine the distribution and migration pattern of resident Canada geese; to coordinate the inventory of biotic resources with land management agencies and academicia; to develop operational species management plans for wildlife in Arizona; to investigate the status and prescribe management needs of nongame birds and mammals that occur in restricted habitats or low numbers within Arizona; to prepare and publish informational guides to the nongame birds and mammals; to determine the adaptability of transplanted bighorn sheep, antelope, javelina, Goulds turkey and river otter in historic habitat; to coordinate wildlife disease studies and relate findings to big game population levels.	984,000.00
W-85-D-24	Wildlife Area Maintenance and Operations. To perform development and maintenance activities on wildlife and waterfowl management areas statewide.	348,100.00
W-87-L-22	Wildlife Area Land Leases. To lease 5,519 acres of State lands for antelope winter range, buffalo range and a waterfowl resting and feeding area.	3,400.00
W-93-S-13	Arizona Firearms Safety Program. To conduct a firearms safety program which enhances the safety and well-being of firearm users by providing instruction and practice in the safe use of firearms and archery equipment.	140,900.00

Number	Description	Funds
W-78-R-28	Statewide Investigations. To develop a method for accurately aging javelina over 21.5 months old; to develop and test a system which uses spectral reflectance signatures to estimate mule deer numbers on western ranges; to determine if extreme weather conditions on North Kaibab winter range are correlated with juvenile deer mortality, yearling buck growth and summer adult herd size; to determine average 5-year and longer term cost per coyote removed in relation to value of unit gains (or losses), annual changes in antelope population size concurrent with annual coyote reduction program, changes in antelope fawn/doe ratios in response to a time-specific 150 man-day coyote reduction program on a 190 square mile portion of Anderson Mesa antelope summer range; to determine density, sex ratio and age composition, activity patterns, daily movements, home ranges of various sex and age classes and reproductive and harvest rates of a northern Arizona black bear population; to determine population characteristics, spatial distribution and habitat selection of desert bighorns relocated and released at Aravaipa Canyon, Goat Mountain and Virgin Mountains; to determine the number of years needed to establish bighorn populations with a sustained huntable surplus of adult rams; to determine habitat requirements of black bears relative occurrence of radio-marked black bears in areas subject to recent logging, grazing, intensive recreation and road building in relation to the amount of area subjected to these activities on the Leonard Canyon area of Arizona; to determine if a high density deer population is significantly affecting the vegetative composition of a desert mule deer range; to publish a monograph of life history, behavior, population dynamics and management of javelina in Arizona; to develop a field guide recognizing black bear sign and predation, capturing and handling of bears and proper collection of biological specimens and data; to develop a 10-year research operational plan for big game in Arizona.	$ 706,200.00
	D-J Total	$1,061,280.00
	P-R Total	3,379,520.00
	Grand Total	$4,440,800.00

ARKANSAS

FW-1-27	Fish and Wildlife Management Coordination. To plan, administer, and coordinate Arkansas' fish and wildlife restoration program. (60% D-J $66,000; 40% P-R $44,000)	$ 110,000.00
FW-3-24	Cooperative Statistical Project. To develop statistical methods of design and application for special problems involving fish and wildlife; and to provide consultation to cooperating States. (50% D-J $6,433.5; 50% P-R $6,433.5)	12,867.00
FW-6-9	River Basins Study. To gather data on fish and wildlife resources impacted by State and Federal land and water management projects and to recommend appropriate mitigating measures or alternatives; to conduct surveys on major streams for fish and wildlife. (50% D-J $20,000; 50% P-R $20,000)..	40,000.00
F-18-19	Cooperative Fish Parasite and Disease Study. To identify fish parasites and diseases in the cooperating States; to conduct research and devise control measures; and to train State personnel in the identification identification and control of fish parasites and diseases.	8,000.00
F-19-20	Maintenance and Development of State-owned Fishing Areas. To fertilize State lakes and nursery ponds; to construct and maintain stream and lake access areas; to rear and release several species of fish; and renovate existing dams and spillways.	425,000.00
W-56-23	Statewide Research Project. To conduct surveys and research on game animals, fur bearers, eastern cougar, and endangered bats; and to conduct wildlife parasite and disease investigations and evaluate bald eagle hacking.	421,768.00

Number	Description	Funds
W-61-11	Buffalo River Wildlife Management Area Land Acquisition. To acquire a 192-acre addition to the management area.	$ 36,000.00
W-64-16	Statewide Wildlife Development. To carry out development for public use and game management procedures on game management areas.	2,065,883.00
W-69-8	Acrea for Wildlife. To develop landowner attitudes for application of sound wildlife management by providing recommendations for production and maintenance of food, cover, and water for wildlife.	76,000.00
H-1-12	Hunter Safety Program. To conduct a comprehensive statewide hunter safety program.	176,472.00
	D-J Total	$ 525,434.00
	P-R Total	2,846,556.00
	Grand Total	$ 3,371,990.00

CALIFORNIA

F-4-D-33	Stream and Lake Improvement. To maintain and improve lake and stream habitat statewide so as to realize maximum game fish production to meet recreational demands; to provide for perpetuation of endangered species of game fish.	$ 480,000.00
F-6-C-32	Fish Management Coordination.	102,500.00
F-9-R-30	Sturgeon, Striped Bass, and Resident Fishes Study. To obtain life history, population, and harvest information needed for the proper management of sturgeon and striped bass sport fisheries in the Sacramento-San Joaquin estuary; to determine abundance, distribution, migration and exploitation rates of catfish, crappie and largemouth bass in the Sacramento-San Joaquin estuary.	363,000.00
F-10-R-30	California Wild Trout Stream and Lake Study. To develop and implement plans for management of California wild trout stream.	129,000.00
F-18-R-24	Reservoir Management. To evaluate the role of Florida and other bass in California; to evaluate a 12-inch minimum size limit on bass; to determine genetic composition of centrarchid populations.	229,000.00
F-25-R-17	Central California Marine Sportfish Survey. To evaluate habitat of sportfish populations; to determine certain life history aspects of selected inshore fishes.	169,000.00
F-27-D-13	Nearshore Sportfish Habitat Enhancement Program. To develop, maintain, and enhance marine sport fisheries in and around kelp beds along the California coast.	131,500.00
F-28-R-11	Trout Genetics Study. To evaluate the inheritance of production traits, assess the nature and significance of environmental factors influencing performance, and apply this information to the improvement of trout broodstocks.	25,000.00
F-32-R-9	Southern California Marine Sportfish Research. To conduct life history studies and population dynamics measurements of selected rockfishes.	267,000.00
F-33-R-8	Restoration and Maintenance of Native Threatened Salmonids. To determine the occurrence, distribution, and habitat requirements of threatened and endangered salmonids in California.	132,500.00

CALIFORNIA

Number	Description	Funds
F-35-R-6	Southern California Marine Sportfish Monitoring Program. To estimate the impact of recreational angling on the marine resources of southern California.	$ 175,500.00
F-38-R-3	Central Valley Salmon, Steelhead, and American Shad Enhancement Project. To maintain and enhance spawning stocks of salmon, steelhead, and shad in Central Valley rivers and tributaries.	285,000.00
W-29-C-37	Wildlife Management Coordination.	103,067.00
W-58-HS-12	Hunter Safety. To provide opportunities for 40,000 persons in safe hunting practices, basic principles of conservation, and sportsmanship; assist instructors with problem areas and provide refresher training opportunities to 700 instructors.	396,532.00
W-64-D-1	Wildlife Habitat Development and Maintenance Project. To maintain and improve habitat conditions on statewide basis for primarily upland game and big game, and on seven intensively managed waterfowl areas and one upland game/big game area.	4,599,113.00
W-65-R-1	Wildlife Research or Surveys. To compile statewide inventory information of wildlife species including waterfowl, upland game, big game, and nongame. Limited research is conducted.	1,231,654.00
	D-J Total	$ 2,489,000.00
	P-R Total	6,330,366.00
	Grand Total	$ 8,819,366.00

COLORADO

FW-26-P-2	Comprehensive Plan Option. To fund all activities in the Colorado Division of Wildlife program eligible for cost-sharing under the Pittman-Robertson and Dingell-Johnson Acts using the Comprehensive Conservation Plan Option (P.L. 91-503). (16.70% D-J; 83.30% P-R).	$ 3,737,533.00
	D-J Total	$ 623,818.00
	P-R Total	3,113,715.00
	Grand Total	$ 3,737,533.00

CONNECTICUT

F-50-D-4	Operation and Maintenance of Connecticut Fishways and Salmon Holding Facility. To trap all returning adult Atlantic salmon. To pass, and/or enumerate other anadromous species over fishway. To hold Atlantic salmon for spawning.	$ 122,700.00
F-54-R-3	A Study of Marine Recreational Fisheries in Connecticut. To describe the marine recreational fisheries in Connecticut for use in preparing regional and State management plans. To assess the effects of fisheries exploitation on the scup population.	160,292.00
F-57-R-2	Inland Fisheries Research and Management in Connecticut. To obtain data necessary for a warmwater management plan, and to obtain data necessary for a trout salmon management plan.	193,112.00
F-58-C-2	Federal Aid Coordination. To plan, administer, and supervise all Fisheries Federal Aid Programs.	16,000.00
W-36-R-19	Atlantic Flyway Cooperative Waterfowl Banding Program. To participate in the Atlantic Flyway Cooperative Banding Program.	4,040.00

Number	Description	Funds
W-49-R-8,9	Wildlife Investigations. White-tailed deer population analyses; wild turkey establishment; snowshoe hare habitat improvement; beaver colony dynamics; and waterfowl banding scaup feeding habits.	$1,023,228.00
W-54-T-3	Technical Assistance in Wildlife. To provide technical assistance to private landowners and government agencies concerning wildlife management practices.	217,931.00
W-57-S-3	Conservation Education/Firearms Safety Program. To provide hunters with an educational program designed to promote their safety while hunting, improve their abilities in weaponry use and handling, wildlife management and identification, first aid, hunter/landowner relations, etc.	359,442.16
	D-J Total	$ 492,104.00
	P-R Total	1,604,746.08
	Grand Total	$2,096,746.08

DELAWARE

FW-2-C-27	Fish and Wildlife Management Coordination. To provide supervision and administration to coordinate D-J and P-R activities. (40% D-J; 60% P-R)	$ 90,000.00
FW-4-T-12	Technical Assistance for Fish and Wildlife Management. To provide technical assistance to private landowners, land-use planners, State and Federal agencies in management of fish and wildlife habitat. (60% D-J; 40% P-R)	45,000.00
F-2-D-33	Fresh Water and Marine Development. To develop and maintain facilities used in management and harvest of game and fish.	240,000.00
F-32-R-5	Delaware Pond Management Program. To increase game fish productivity in Delaware's freshwater ponds and to improve angler harvest of game fishes.	33,000.00
F-33-R-3	Survey of the Sport Fishery of Delaware. To determine the importance of the Delaware Bay sport fishery for weakfish during their spring spawning run and to determine the importance of the Delaware portion.	24,000.00
W-5-D-36	Habitat Development Program. To manage, develop and maintain natural resources on State-owned wildlife areas, public hunting, habitat, quality recreation, wintering waterfowl habitat, demonstration areas, prime agricultural land, critical natural areas and wildlife viewing areas.	400,000.00
W-16-R-33	Wildlife Investigations. To collect biological and harvest data on several wildlife species in Delaware. To evaluate the experimental introduction of two exotic species.	111,992.00
W-21-R-19	Atlantic Flyway Cooperative Banding Program. To operate cooperative banding stations in eastern Canada to secure waterfowl data.	3,040.00
W-25-S-13	Delaware's Hunter Safety Program. To train hunters in the proper use of firearms to the safety and well-being of the general public and instill a high ethical standard among hunters throughout the State.	45,500.00

Number	Description	DELAWARE Funds
W-27-S-2,3	Hunter Training Center Operation. To provide hunter training that will protect the well-being of hunters and the general public as well as improve the behavior and attitude of hunters while in the field.	$ 104,800.00
	D-J Total	$ 360,000.00
	P-R Total	738,332.00
	Grand Total	$1,098,332.00

FLORIDA

F-1-33	Coordination. To plan, administer, and coordinate Florida's fish restoration program.	$ 65,753.00
F-18-20	Cooperative Fish Parasite and Disease Study. To identify fish parasites and diseases in the cooperating States; to conduct research and devise control measures; and to train State personnel in the identification and control of fish parasites and diseases.	8,000.00
F-24-17	Largemouth Bass Investigations. To evaluate protective regulations for largemouth bass; to determine the validity of otoliths for aging.	109,023.00
F-30-11	Oklawaha Basin Fisheries Investigations. To evaluate the effects of habitat restoration by dewatering and/or vegetative plantings on sport fish populations in selected lakes of the Oklawaha chain.	192,167.00
F-33-8	St. Johns River Fisheries Resources. To determine the impact of fluctuating water levels on selected game fish of the upper St. Johns River; to determine composition and abundance of zooplankton, macroinvertebrates, game and forage fish and major aquatic vegetation communities in the lower St. Johns River.	333,527.00
F-34-7	Striped Bass and Hybrid Stocking Program. To stock striped bass and hybrid fingerlings into public fishing waters.	101,104.00
F-35-7	Fish Attractor Installation. To install fish attractors at selected statewide sites.	174,000.00
F-36-4	North Florida Streams Research Project. To evaluate introductions of selected sport fishes in streams; to investigate annual production and recruitment of sport fish in the Escambia marsh; to determine annual catch statistics in the Escambia River.	125,943.00
F-37-2	Ochlockonee River and Reservoir Project. To determine the ecological effects and management benefits of a major reservoir drawdown; to investigate the behavior of hybrid striped bass in a riverine habitat.	88,642.00
F-38-2	Kissimmee Chain of Lakes Studies. To investigate and monitor key ecological aspects including water quality, fish populations, habitat quality, and angler use in the Kissimmee chain of lakes.	157,170.00
W-13-37	P-R Coordination. To plan, supervise and coordinate Florida's wildlife restoration program.	25,000.00
W-33-34	Wildlife Harvest and Economic Survey. To provide survey, inventory, and statistical data for the management of wildlife resources. ...	110,000.00
W-35-33	Wildlife Management Area Development and Maintenance. To develop and maintain capital improvements and to manage habitat and control public use on management areas.	1,697,345.00

Number	Description	Funds
W-41-31	Statewide Wildlife Research. To conduct a Statewide wildlife research program to investigate wildlife disease and parasite problems; develop wild hog management strategies; develop a method to distinguish northern and southern wood ducks; monitor lead shot ingestion in ring-necked ducks; determine bobcat and otter population dynamics and harvest levels, and determine black bear habitat requirements and the extent of depredations on apiaries.	$ 245,465.00
W-54-6	Wildlife Resources Management. To determine harvest of antlerless deer; survey deer herd conditions; determine the value of grazing systems for wildlife management; to conduct inventories of doves, deer, waterfowl, and other selected species; to monitor wildlife diseases, and to survey egrets, herons and Florida mottled ducks.	141,574.00
W-55-4	Technical Guidance. To provide technical guidance on wildlife matters to private landowners, corporate landowners, and other government agencies.	104,324.00
H-3-3	Hunter Education. To establish a hunter safety program to reduce hunter and firearm accidents.	600,000.00
	D-J Total	$ 1,355,329.00
	P-R Total	2,923,708.00
	Grand Total	$ 4,279,037.00

GEORGIA

FW-1-25	Southeastern Cooperative Fish and Game Statistics Project. To develop statistical methods of design and application for specified biological problems involving fish and wildlife, and to provide consultation to cooperating States. (50% D-J $7,394; 50% P-R $7,394)	$ 14,788.00
F-16-20	Southeastern Cooperative Fish Disease Project. To identify fish parasites and diseases in the cooperating States; to conduct research and devise control measures; and to train State personnel in the identification and control of fish parasites and diseases.	8,000.00
F-24-11	Federal Aid Coordination. To plan, administer and coordinate Georgia's fish restoration program.	56,828.00
F-25-11	Northern Region Fisheries Investigations. To determine pressure, catch, standing crop, relative abundance, and age and growth of walleye in Lake Nottely; to document spinal deformities of smallmouth bass in Lake Chatuge; to determine rainbow trout dynamics in small headwater streams.	120,000.00
F-26-11	Walton Experiment Station. To determine fishing pressure, harvest, and catch rates on the Chattahoochee River; to survey the standing crop of fishes in Lake Oconee.	67,500.00
F-28-11	Southwest Region Fisheries Investigations. To determine population, growth and catch of fishes in Lake Blackshear; to survey sport fishes in four major reservoirs in south Georgia.	117,560.00
F-29-11	South Central Region Fisheries Investigations. To survey the fishery and fish populations in the Altamaha River; to maintain and develop Evans County Public Fishing Area; to determine selected life history aspects of six major sport fishes.	67,500.00

GEORGIA

Number	Description	Funds
F-30-11	Coastal Region Fisheries Investigations. To describe selected physical, chemical, and environmental features of the Savannah River, its basin, and its fish community; to rear and release striped bass fingerlings in selected reservoirs statewide; to determine fishing pressure and habitat on the Savannah River.	$ 153,333.00
F-31-11	Marine Fisheries Investigations. To determine the magnitude of the marine recreational fishery in both the inshore and offshore waters; to maintain and improve Georgia's offshore artificial buoy system for recreational fishing.	80,000.00
F-33-7	West Central Region Fisheries Investigations. To determine fishing pressure, harvest, and other use information on the upper Flint River.	40,045.00
F-35-6	Cooperative Continuing Education Project. To provide continuing education for fishery biologists and administrators in cooperating States.	2,400.00
F-36-5	Northwest Region Fisheries Investigations. To survey secondary trout streams; evaluate the fish population of Carters Lake; and conduct a creel census on Carters Lake, Allatoona Reservoir, and Conasauga and Coosawattee Rivers.	69,568.00
W-6-39	Wildlife Management Coordination. To plan, administer, and coordinate research, surveys, management, development, and hunter safety programs.	156,800.00
W-28-27	Wildlife Disease Study. To determine the causes of wildlife diseases in the Southeast, and to devise control measures.	7,000.00
W-36-23	Statewide Wildlife Development. To develop and maintain capital improvements, manage habitat, and control public use on management areas.	2,791,381.00
W-37-23	Statewide Wildlife Investigations. To carry out habitat improvement studies and evaluate management techniques for game species; to conduct surveys for trends and population status of selected species.	32,015.00
W-43-12	Wildlife Turkey Investigations. To introduce wild turkeys in selected areas and to evaluate wild turkey stocking.	99,447.00
W-45-8	Technical Guidance. To provide technical guidance on wildlife management to agencies and to provide the public with information regarding practical wildlife abatement measures and wildlife management plans for their land.	114,000.00
W-47-6	Statewide Wildlife Surveys. To survey populations of waterfowl, deer, coyote, doves, and other species; to measure the harvest of selected wildlife; and to determine relative densities and distribution of black bears in North Georgia.	233,323.00
W-48-5	Canada Goose Restorations. To experimentally introduce Canada geese in Georgia and determine their success.	26,500.00
H-2-12	Hunter Education. To conduct a comprehensive statewide hunter safety program.	213,809.00
	D-J Total	$ 790,128.00
	P-R Total	3,681,669.00
	Grand Total	$4,471,797.00

HAWAII

Number	Description	Funds
F-11-D-8	Statewide Freshwater Fisheries Development. To increase quantity and improve quality of fish habitat; improve quality of sport-fishing; and provide for optimum public utilization and enjoyment of the fishery resources.	$ 101,000.00
F-12-D-8	Statewide Marine Development. To continue development and operation of established artificial reefs and construct, install and maintain fish aggregating devices to create adequate cover for fish life and create additional fishing opportunities.	165,750.00
F-13-C-8	Coordination of Statewide Dingell-Johnson Program.	39,000.00
F-14-R-8	Freshwater Fisheries Research and Surveys. To improve bass and tucunare management in Wahiawa Reservoir, Oahu; to determine if articifial feeding can yield a harvestable channel catfish population in Ku Tree Reservoir; to acquire information on the freshwater fisheries of Hawaii and their utilization.	48,000.00
F-15-T-8	Statewide Freshwater Fisheries Technical Guidance. To investigate, evaluate and document the potential impacts on freshwater ecosystems of a variety of proposed undertakings.	18,000.00
F-16-T-8	Statewide Marine Technical Guidance. To provide technical guidance, evaluation, and advice on aspects of marine fisheries and habitat for purpose of preventing or mitigating damages to fishery values.	30,000.00
F-17-R-8	Statewide Marine Research and Surveys. To gather needed data for the formulation of management measures that will protect while permitting the rational utilization of the marine renewable resources of Hawaii.	110,000.00
W-16-D-9	Statewide Wildlife Management and Habitat Development. To develop and maintain procedures to benefit wildlife populations and to conduct a hunting program on game management areas.	420,700.00
W-17-R-9	Statewide Game Research, Surveys and Inventories. To conduct surveys to determine the status, trends, and utilization of game species and their habitats in the State of Hawaii.	76,900.00
W-18-R-9	Statewide Nongame and Endangered Species Program. To gather available information and conduct surveys and research needed to determine the status of, and to manage the State's nongame and endangered species.	136,100.00
W-19-C-9	Coordination of Statewide Pittman-Robertson Program.	71,000.00
W-20-T-9	Statewide Technical Guidance. To provide technical assistance and advice to agencies and individuals on wildlife and wildlife habitat management, protection, and enhancement.	32,000.00
W-21-HS-7	Hunter Safety Training. To plan, develop, and implement a hunter safety training program to provide hunters and potential hunters training in firearms and archery safety, sporting ethics, conservation pronciples, and laws and regulations.	83,960.00
	D-J Total	$ 511,750.00
	P-R Total	820,660.00
	Grand Total	$ 1,332,410.00

IDAHO

Number	Description	Funds
F-71-R-8	Fisheries Management Invrstigations. To obtain data on angler use and harvest, water quality, fish populations, and other parameters as needed by fishery management statewide.	$ 103,400.00
F-73-R-6	Fishery Research. To conduct investigations of recreational fisheries of Idaho with special attention to chinook salmon and steelhead. Fisheries of Pend Oreille Lake, Henry's Lake, Coeur d'Alene Lake, Lochsa River, Clearwater River, Blackfoot River, Kootenai River, Snake River, and Portneuf River will be intensively investigated.	665,700.00
W-159-HS-12	Hunter Education Program. To train hunters and shooters to conduct themselves in a safe and responsible manner during all archery or firearm related activities and to educate them in the principles of wildlife management.	209,600.00
W-160-R-11	Wildlife Research. To conduct research studies which include: (1) effects of prescribed burning of brush fields on an elk population; (2) reproduction performance of a mule deer population that is subjected to designated harvest levels; (3) productivity and mortality of a bighorn sheep herd; (4) evaluation of needs of mule deer and modeling of certain big game herds; (5) determination of impacts of phosphate mining on big game; (6) status and trends of antelope herds.	685,700.00
W-161-D-10	Wildlife Land Management - REgions 1 and 2. To maintain and develop three wildlife areas and over 35 access units and a limited "off area" habitat development program; to locate and negotiate for suitable wildlife lands and develop, test,and promote methods designed to create or improve wildlife habitat.	268,900.00
W-163-D-10	Wildlife Land Management - Region 3. To maintain and develop the Boise River Game Range, the C. J. Strike Wildlife Management Area, the Fort Boise Wildlife Management area, and over 40 small access units and limited "off area" habitat improvement programs; to locate and negotiate for suitable wildlife lands; develop, test, and promote methods designed to create or improve wildlife habitat.	295,800.00
W-164-D-10	Wildlife Land Management - Region 4. To maintain and develop the Snake River Wildlife Management Area (consisting of Hagerman, Niagra Springs, Billingsley Creek, and Carey Lake Management Areas), and 28 small isolated parcels under license from the Bureau of Reclamation.	125,600.00
W-166-D-10	Wildlife Land Management - Regions 5 and 6. To maintain and develop six wildlife areas and over 60 small access units and a limited "off area" habitat development program within the boundaries of Regions 5 and 6; to locate and negotiate for suitable wildlife lands; develop, test, and promote methods designed to create or improve wildlife habitat.	346,410.00
W-167-D-10	Wildlife Land Management - Statewide. To plan, organize, instruct, expedite, and inspect wildlife habitat development projects; to provide quality hunting by providing and improving wildlife habitat.	84,400.00
W-168-C-1	Wildlife Coordination. Coordination of Statewide P-R Program. .	67,000.00

Number	Description	Funds
W-170-R-8	Statewide Wildlife Surveys and Inventories. To inventory and manage big game, upland game, and waterfowl populations.	$ 749,000.00
W-172-L-1	Snow Peak Wildlife Management Area - Land Exchange. To acquire 12,055 acres of remote Rocky Mountain elk habitat through the exchange of 3,383 acres of white-tailed deer habitat valued at $4,586,000.	0.00
	D-J Total	$ 769,100.00
	P-R Total	2,832,410.00
	Grand Total	$ 6,601,510.00

ILLINOIS

FW-5-C-26	Federal Assistance Program Administration. To supervise, administer, and coordinate the Illinois Federal Aid Program. (20% D-J; 80% P-R).	125,247.00
FW-7-D-20	Mississippi River Fish and Wildlife Management Area. To develop and manage habitat and sanctuary for migrant and resident waterfowl, and to provide access and public use facilities for wildlife-related public recreation on 24,386 acres of land and water within pools 21-26. (P-R 100%).	247,583.00
FW-8-D-9	Rice Lake/Banner Marsh Wildlife Management Area. To continue the operation and management of waterfowl habitat and wildlife-related public use facilities at Rice Lake; to begin minor habitat management activities and provide public access facilities to the state-owned portion of Banner Marsh in Fulton and Peoria Counties. (P-R 100%).	178,716.00
FW-9-D-7	Carlyle Lake Fish and Wildlife Management Area. To provide the food and habitat necessary to sustain eight million waterfowl use-days; to develop and maintain improved habitats for upland and forest wildlife; to provide the facilities for public hunting, fishing, and numerous non-consumptive wildlife-oriented recreational pursuits. (D-J 10%; P-R 90%).	88,289.00
FW-10-R(P)-2	Illinois Fish and Wildlife Conservation Plan. To develop a fish and wildlife management plan and system by preparing a strategic plan, an operational plan and management system, and a performance and evaluation system for the management process. (D-J 50%; P-R 50%).	120,589.00
F-26-R-8	Illinois Striped Bass Project. To prepare final reports on the effects of striped bass on the existing fish populations of two Illinois reservoirs, and on the improvement of tank culture techniques for striped bass.	23,904.00
F-29-D-6	Management of State Waters. To conduct surveys, fisheries management, and habitat improvement to provide 4.5 million angling days on 80 state-managed lakes from July, 1983, through July, 1984.	138,563.00
F-35-R-3	Largemouth Bass Thermal Environments. To evaluate the spawning characteristics of four specific genetic stocks of largemouth bass (pure northern subspecies, pure Florida subspecies, and both of their F1 hybrids); to determine the genetic composition of the four stocks, to evaluate the survival, growth, and reproductive success of each stock; to determine temperature requirements of the various life stages of the four stocks, including embryos, fry, juveniles, and adults; to perform biochemical	

Number	Description	Funds
	genetic analysis on largemouth bass in Illinois lakes and on bass from outside sources stocked in Illinois; and to provide recommendations for stocking of the four types in Illinois waters.	$ 68,529.00
F-37-R-4	Effects of Using Hybrid Carp to Control Aquatic Vegetation. To compare effects of hybrid grass carp and selected aquatic herbicides on aquatic vegetation and the sport fishery; on the rates of plant decomposition; nutrient cycling and flow and the subsequent effect on the bass, bluegill, and catfish populations; and to determine the genetic composition and reproductive capability of F1 hybrid carp.	197,599.00
F-39-R-2	Using Hybrid Striped Bass to Improve Sport Fishing in Illinois. To determine changes in growth, food habits, and angler harvest of selected species resulting from the introduction of hybrid bass in Spring Lake; to prepare management recommendations for hybrid striped bass in small impoundments; to determine distribution of the hybrids with respect to temperature and dissolved oxygen; and to measure escapement of hybrids over the spillway.	24,250.67
F-40-R-2	Evaluation of the Introduction of Tiger Muskie Into Impoundments. To prepare management guidelines by 1986 which describe the probable impacts of tiger muskie introductions on the population structure, growth, and angler harvest of largemouth bass and bluegill when fingerling tiger muskie are stocked in small impoundments dominated by bass-bluegill combinations; and to determine the accuracy with which total harvest is estimated from a specific partial creel procedure.	72,990.00
F-41-R-3	Illinois Walleye Research. To develop techniques for intensively rearing walleye larvae and fingerlings; to compare the survival of fingerlings intensively reared in tanks with those reared in ponds; and to compare the relative survival of fingerlings with the survival of walleye larvae in one study lake.	43,192.00
F-42-R-1	Evaluation of Hybrid Crappie as a Sport Fish in Farm Ponds and Small Impoundments. To produce hybrids of black and white crappies; compare growth rates and sex ratios of each of the four genetic stocks; produce breeders of each stock of same age and size for direct comparisons; establish mixed populations of largemouth bass, bluegills, and channel catfish into which hybrid brood stocks and pure species of crappies can be introduced.	48,256.00
F-44-R-1	Rend Lake Threadfin Shad Project. To determine growth rate of white crappie, black crappie, and largemouth bass after threadfin shad introduction compared to before introduction, to determine utilization of shad by these species, and determine effects of shad on sport fish harvest.	49,729.00
W-43-R(SI)-32	Illinois Waterfowl Surveys and Investigations. To conduct surveys and investigations on waterfowl; to conduct aerial inventories; to determine incident of shot ingestion in mallards, Canada geese and scaup; and to evaluate waterfowl population dynamics.	166,639.00
W-49-R(SI)-31	Statewide Wildlife Surveys and Investigations. To conduct small game surveys and inventories.	120,613.00
W-51-D-29	Shawnee Cooperative Wildlife Habitat Development. In cooperation with the U.S. Forest Service, to improve and maintain habitat for forest wildlife and to develop and maintain access roads and parking areas for the users of the wildlife resources in the Shawnee National Forest.	180,653.00

Number	Description	Funds
W-54-D-29	Sanganois Development and Operations Project. To provide food, habitat, and sanctuary for waterfowl migrating through the Illinois River Valley; to provide the site and facilities for a high-quality waterfowl hunt; and to provide the necessary habitat for upland and forest wildlife and the facilities for the public enjoyment of these species.	$ 105,808.00
W-63-R(SI)-26	Forest Wildlife Investigations. To conduct studies on white-tailed deer, ruffed grouse, and wild turkey in Illinois; to evaluate wild turkey habitat; to study white-tailed deer fawn survival; and to investigate heavy metals, toxic contaminants, and disease relationships to white-tailed deer in Illinois.	275,756.00
W-66-R-24	Cooperative Wildlife Research. To develop and evaluate roadside management for pheasants and other wildlife; to investigate agricultural and other factors influencing pheasant distribution; to develop, describe, and apply management for prairie chickens and associated fauna, and to develop management strategies for fox squirrels.	163,886.00
W-76-D-18	Statewide Public Lands Habitat Development Project. To develop and maintain optimum wildlife habitat on 44 state-owned areas, and to provide the facilities for the wildlife-oriented public use of these areas.	803,172.00
W-80-D-13	Shelbyville Fish and Wildlife Management Area. To develop, maintain, and operate the subunits of the Shelbyville Reservoir, in Moultrie County, to provide for the habitat needs of migratory and resident wildlife and for wildlife-oriented public use.	117,739.00
W-82-S-12	Conservation Appreciation and Hunter Safety. To train volunteer instructors and 15,000 students; to purchase equipment and training aids; to conduct Master Instructor meetings; to evaluate the program and prepare a hunter ethics responsibility unit; and to administer the statewide hunter education program.	153,653.00
W-83-D-10	Rend Lake Wildlife Management Area. To develop and manage habitat for waterfowl and other wildlife species, and to provide facilities for wildlife-oriented public use on nearly 17,000 acres at Rend Lake in south-central Illinois.	138,050.00
W-85-D-11	Roadside and Farmland Wildlife Habitat Project. To enhance populations of prairie and grassland-using wildlife by preserving, developing, and improving these habitats along rural roadsides and idle farmland via seeding, promoting delayed mowing, and contracting with landowners.	191,590.00
W-87-R-5	Cooperative Forest Wildlife Research. To conduct deer range appraisal; movement and habitat use studies.	336,971.00
W-88-R-4	Cooperative Waterfowl Research. To collate and analyze new and existing data pertaining to waterfowl and their ecology in Illinois.	82,200.00
W-91-R-1	Illinois Fish and Wildlife Info. System. To develop an operational computerized data set on Illinois wildlife.	126,881.00

Number	Description	Funds
W-90-S-1	Eastern Illinois University Range Rehabilitation. To renovate an existing indoor rifle-pistol range to upgrade the air transfer system to meet the OSHA standards (29CFR1910.1000 Tabe V2) located at Eastern Illinois University for use by Hunter Education Program students and instructors.	$ 68,128.00
	D-J Total	$ 761,184.00
	P-R Total	3,697,991.00
	Grand Total	$ 4,459,175.00

INDIANA

FW-2-D-30	Tri-County Development. To develop, maintain,and operate the Tri-County Fish and Wildlife Area in Noble and Kosciusko Counties for wildlife, public hunting and fishing, and other compatible recreational uses. (10% D-J; 90% P-R).	$ 101,600.00
FW-14-C-30	Federal Aid Coordination. To administer the Division of Fish and Wildlife participation in all P-R, D-J, and Anadromous Fish programs. (20% D-J; 80% P-R).	40,000.00
FW-16-D-27	Pigeon River Development. To continue the development, operation, and maintenance of this 11,500 acre public fishing and hunting area in LaGrange and Steuben Counties. (10% D-J; 90% P-R).	204,100.00
FW-17-D-27	Glendale Development. To develop, operate and maintain the Glendale Fish and Wildlife Area in Daviess County; to improve wildlife habitat and to provide facilities for fish and wildlife related public uses. (20% D-J; 80% P-R).	232,900.00
FW-18-D-26	Crosley Area Development. To develop, operate and maintain the Crosley State Fish and Wildlife Area and the Brush Creek Fish and Wildlife Area, both in Jennings County; to improve wildlife habitat and to provide facilities for fish and wildlife related public recreation. (14% D-J; 86 % P-R).	103,700.00
FW-21-D-18	Public Access Program. To maintain 159 public accesses to fishing waters throughout the State; to develop 7 new access facilities; to rehabilitate 3 sites; to dredge 5 launching bays; and to purchase and maintain equipment and facilities to facilitate access maintenance and development. (100% D-J).	476,000.00
Fw-22-D-15	Fish and Wildlife Area Development. To develop, operate, and maintain wildlife habitat and fish and wildlife related public use facilities on eight state-managed areas. (10% D-J; 90% P-R).	1,318,200.00
FW-23-L-2	Fish and Wildlife Area Land Acquisition. To acquire 1,018 acre addition to the Kankakee Fish and Wildlife Area for waterfowl feeding, hunting, refuge habitat, and compatible recreational uses. (100% P-R).	1,883,300.00
F-10-D-16	Statewide Fisheries Management. To improve fishing (species and size) throughout Indiana by conducting surveys, controlling aquatic vegetation, and manipulating fish populations in lakes, reservoirs, and streams.	394,104.00
W-13-D-37	Willow Slough Development. To develop, maintain and operate the Willow Slough Fish and Wildlife Area in Newton County to provide habitat for migratory waterfowl and other wildlife; to provide additional opportunities for public hunting and other wildlife-oriented recreational activities.	203,950.00

Number	Description	Funds
W-18-D-25	Winimac Development. To develop, maintain, and operate the Winimac State Fish and Wildlife Area in Pulaski County to provide wildlife habitat and to provide for public hunting and other wildlife-oriented recreational activities.	$ 131,500.00
W-26-R-15	Statewide Wildlife Research. To conduct production, harvest, and population index surveys on all game and furbearers; to conduct research studies on deer, pheasants, bobwhite, rabbits and waterfowl.	257,444.00
W-27-D-15	Forest Wildlife Development. To inventory forest habitat conditions and to plan, coordinate, and implement woodland wildlife habitat improvement activities on state and national forests in south-central Indiana; to trap and transplant ruffed grouse and wild turkeys on these areas; to develop and maintain roads, trails, and parking areas to facilitate wildlife-oriented public recreation on these areas.	173,150.00
W-28-S-11	Hunter Education. To train and certify 12,000 Students in hunter education and to maintain 500 volunteers and 157 Conservation Officers as Instructors. To administer, coordinate, supervise, and promote the Hunter Education Program and develop a statewide program on hunter responsibilities.	150,000.00
	D-J Total	$ 1,101,592.00
	P-R Total	4,568,356.00
	Grand Total	$ 5,669,948.00

IOWA

FW-43-D-16	Statewide Operation of Wildlife Management Areas. To develop, operate and maintain fish and wildlife management areas and access sites throughout the State; to preserve and improve wildlife habitats and provide for the public enjoyment of the fish and wildlife resources. (20% D-J; 80% P-R).	$ 2,587,225.00
F-90-R-7	Small Reservoir Fisheries Investigations. 1) To classify 107 Iowa lakes into distinct groups utilizing watershed and lake basin characteristics and determine standing stock of fish, length frequencies and size structure characteristics within each group. 2) To determine changes in benthic biomass production and changes in growth structure, and biomass of largemouth bass, bluegill, crappie and channel catfish populations in Cold Spring Lake caused by summer destratification.	49,388.00
F-94-R-4	Reservoir Investigations. To develop management guidelines for habitat improvement in man-made impoundments with emphasis on shoreline protection and fish attracting devices to increase catch in the sport fishery; and to determine methods for control of nuisance blue-green algae and provide strategies for management of fish populations at these lakes.	101,000.00
F-95-R-3	Natural Lakes Investigations. 1) To evaluate and define management needs and practices for walleyes in East and West Okoboji Lakes, and smallmouth bass in West Okoboji Lake. 2) To evaluate the development of a sport fishery in a renovated, mechanically aerated winterkill lake, and define the use of mechanical aerators as management tools in winterkill lakes.	58,000.00
F-96-R-2	Wing and Closing Dam Investigations. To determine wing and closing dam characteristics important to fish and fishermen; and to develop recommendations for wing and closing dam construction and modification that would benefit the river's fishery.	60,000.00

IOWA

Number	Description	Funds
F-98-R-2	Fish Hatchery Investigations. To evaluate lethal ozone and/or singlet oxygen molecule concentrations for fish pathogens and effects on fish survival; to determine extenders and temperatures required for cryo-preservation of walleye and muskellunge sperm, culture pathogenic bacteria, prepare and challenge vaccine on fish, and perfect egg separation and hatching technique for channel catfish, to evaluate marking techniques for brood catfish; and to determine spawning success of individual fish.	$ 18,500.00
F-99-R-1	Diversity and Standing Crop of Stream Fishes. To assess stream fish populations, compile vital statistics of selected stream species and compile physical and chemical characteristics of interior Iowa streams.	59,800.00
F-105-D-1	Lake Aeration Program. To install and operate helixor aeration systems in three Iowa public fishing lakes for the prevention of winterkill of the fish populations.	85,000.00
W-84-L-17	Elk Creek Marsh. To acquire a 22-acre tract on the Elk Creek Marsh in Worth County for upland bird management, habitat, and compatible public uses.	48,700.00
W-114-S-14	Statewide Hunter Safety Education Program. To conduct Phase II of the Polk County shooting range by: construction covering shooting points for two 50-yard and one 100-yard pistol and rifle ranges; constructing range house/office and latrine facilities; and constructing all ground and overhead baffling to prevent fired bullets from leaving the shooting range.	221,270.00
W-114-S-15	Statewide Hunter Safety Education Program. To instruct students in the safe and proper use of firearms; to reduce firearms accidents; to teach hunter responsibility and the value of landowner-sportsman relationships; and to provide the basic concepts of game management.	119,080.00
W-115-R-10	Wildlife Research and Surveys in Iowa. To conduct wildlife surveys and inventories; to evaluate an aerial census technique for deer, to determine mortality, home range, movement, and habitat election of white-tailed fawns; evaluation of impacts of no-till farming on upland wildlife; to evaluate ecology of wild turkey, coyote and raccoons.	352,704.00
W-119-L-2	Shimek State Forest. To acquire 44 acres in Lee County, Iowa, for habitat restoration/management and production and harvest of upland and forest wildlife.	36,300.00
W-121-L-1	Hawthorn Wildlife Management Area. To add 155 acre addition to the Hawthorn Lake Wildlife Area in Mahaska County for upland wildlife habitat and watershed protection for Hawthorn Lake.	147,466.67
W-123-R-2	Statewide Endangered Species Research. To determine distribution and abundance of the river otter, grasshopper mouse, evening bat, and Keen's Myotis; monitoring of rest sites of red-shouldered hawk; migration counts and banding operation of five rare species of raptoral birds.	32,472.00
W-126-L-1	Ringgold Wildlife Management Area. To acquire a 240-acre upland habitat addition to the Ringgold Wildlife Area in Ringgold County, primarily for upland wildlife habitat restoration and management.	199,470.00
W-128-L-1	Stephens State Forest. To acquire 535 acres of upland and forest for habitat restoration and management and production/harvest of wildlife on the Stephens State Forest in Appanoose County, Iowa.	240,450.00
	D-J Total	$ 949,133.00
	P-R Total	3,467,692.67
	Grand Total	$4,416,825.67

KANSAS

Number	Description	Funds
FW-9-P-2	Comprehensive Planning Option. To fund all activities in the Kansas Fish and Game Commission program eligible for cost-sharing under the Pittman-Robertson and Dingell-Johnson Acts using the Comprehensive Conservation Plan Option (P.L. 91-503). (18.42% D-J; 81.58% P-R).	$3,616,108.00
	D-J Total	$ 666,087.09
	P-R Total	2,950,020.91
	Grand Total	$3,616,108.00

KENTUCKY

FW-3-7	Statewide Environmental Project. To investigate fish kills and disease problems, monitor pollution, and evaluate habitat alterations on selected streams; to conduct a statewide environmental attitude survey; to develop a stream classification system; to provide technical guidance to Federal, State, and private agencies. (67% D-J $60,300; 33% P-R $29,700).	$ 90,000.00
F-1-2	Statewide Fisheries Coordination. To plan, administer, and coordinate Kentucky's fish restoration program.	69,000.00
F-29-17	Southeastern Cooperative Fish Disease Project. To identify fish parasites and diseases in the cooperating States; to conduct research and devise control measures; and to train State personnel in the identification and control of fish parasites and diseases.	8,000.00
F-40-6	Statewide Fisheries Research Project. To evaluate the impact of predator fish introductions on reservoir fisheries; to evaluate crappie populations and improve their management; to conduct an angler attitude survey; to determine the impact of bass size limits; to evaluate the success of smallmouth bass stocking; to evaluate remedial bass stocking; to assess the population dynamics of black bass, to assess the Ohio River fishery.	200,000.00
F-48-2	Southeastern Cooperative Fishery Continuing Education Project. To provide continuing education for fishery biologists and administrators in cooperating States.	2,400.00
F-50-6	Statewide Fisheries Management Project. To conduct fisheries management activities, surveys, and provide technical guidance in seven fishery districts.	460,875.00
W-45-15	Statewide Wildlife Management. To administer the State's wildlife restoration program; to conduct research and management surveys necessary for evaluation and future guidance of this program; to provide developments designed to benefit resident and migratory game, and to increase hunting opportunity and to maintain physical improvements.	1,457,798.00
W-49-1	Kahler Bottoms Wildlife Management Area Land Acquisition. To acquire 1,905 acres to establish a management area.	571,406.00
H-3-3	Kentucky Hunter Education Program. To conduct a comprehensive statewide hunter safety project.	474,410.00
	D-J Total	$ 800,575.00
	P-R Total	2,533,314.00
	Grand Total	$3,333,889.00

LOUISIANA

Number	Description	Funds
FW-2-25	Research, Design, Machine Compilation,and Analysis of Data. To provide assistance to project leaders in design of their projects, and to analyze Federal Aid research and survey data through statistics and machine computation. (35% D-J $10,500; 65% P-R $19,500).	$ 30,000.00
FW-3-12	Statewide Environmental Investigations. To collect environmental data on fish and wildlife resources and to provide advice to government agencies in planning for fish and wildlife. (35% D-J $46,795; 65% P-R 86,905).	133,700.00
F-3-30	Fish Management Coordination. To plan, administer,and coordinate Louisiana's fish restoration program.	105,100.00
F-18-15	Southeastern Cooperative Fish Parasite and Disease Project. To identify fish parasites and diseases in the cooperating States; to conduct research and devise control measures; and to train State personnel in the identification and control of fish parasites and diseases.	8,000.00
F-19-5	Fish Population Investigations. To annually inventory fish populations and determine water quality in the principal waters in eight districts and to write management plans based on gathered data.	233,000.00
F-23-12	Technical Advice to Owners of Farm Ponds and Lakes. To give technical advice to owners of small ponds and lakes.	30,000.00
F-34-8	Lake Bistineau Investigations. To determine: the diet of adult largemouth and striped bass, the standing crop of predatory game fish and forage fish, and the impact of striped bass introductions on the forage fish population.	46,000.00
F-35-8	Aquatic Vegetation Investigations for Sport Fish Management in Louisiana. To survey and manage aquatic plants in fish management lakes.	55,000.00
F-39-6	Toledo Bend Investigations. To define movements, temperature preference, and food habits of striped bass in Toledo Bend Reservoir. ..	50,000.00
F-40-5	Creel Survey of Lakes. To determine fishing pressure and harvest on Lakes Bussey and D'Arbonne.	17,000.00
F-41-4	Movement of Estuarine Sportfish. To determine movement and migration of spotted seatrout, sand seatrout, red drum, black drum and the Atlantic croaker.	74,000.00
F-42-3	Calcasieu Seatrout Project. To determine critical stages in the life history of spotted seatrout which would be influenced by regulations.	49,500.00
F-43-3	Blue and Channel Catfish Investigations. To determine length at maturity of blue and channel catfish and factors affecting reproduction.	7,800.00
F-44-2	A Survey of Factors Affecting Fish Production in the Larto-Saline Area.	31,000.00
F-45-3	Survival, Food Habits, and Growth of Florida Largemouth Bass Stocked in St. Tammany Parish, Louisiana. To determine survival, food habits, and growth of Florida largemouth bass stocked in the Tchefuncte River and Pearl River Lock Canal.	29,300.00

LOUISIANA

Number	Description	Funds
F-46-2	Striped Bass Production. To rear and release striped bass and hybrid fingerlings in selected waters to enhance sport fishing.	$ 56,250.00
F-47-2	Flathead Catfish Production. To develop techniques for spawning and rearing flathead catfish.	36,500.00
W-10-38	Wildlife Coordination. To plan, administer, and coordinate Louisiana's wildlife restoration program.	100,000.00
W-29-31	Statewide Wildlife Investigations. To conduct population, habitat, production and harvest surveys on game and furbearers, to make habitat improvement studies, to participate in Cooperative Wildlife Disease Project; to conduct waterfowl survey and banding operations.	450,000.00
W-30-31	Statewide Wildlife Development and Management. To develop and maintain capital improvements; manage habitats, and control public use on Wildlife Management Areas.	1,861,435.00
W-39-1	Boundary Surveys. To survey the boundaries of the Boeuf and Sicily Island Hills Wildlife Management Areas.	183,750.00
W-40-1	Fencing Saline, Boeuf and Sicily Island Hills Wildlife Management Areas. To fence the boundaries of the three areas.	453,750.00
H-1-9	Louisiana Firearm and Hunter Education Program. To operate and administer a comprehensive statewide hunter education program.	350,000.00
	D-J Total	$ 885,745.00
	P-R Total	3,505,340.00
	Grand Total	$ 4,391,085.00

MAINE

FWA-1-P-8,9	Comprehensive Fish and Wildlife Plan. To provide a planning process for the Department's long-range program to assist all Department divisions in the execution of species management plans, to coordinate the Department's planning effort with other agencies' programs, to maintain automated files of resource inventories and surveys. (25% D-J; 75% P-R).	$ 674,666.00
F-28-P-7,8	Maine Inland Fisheries Operation Plan. To manage the inland fisheries resources of Maine in a comprehensive manner.	701,000.00
W-59-R-19,29	Atlantic Flyway Cooperative Waterfowl Banding Program. To operate cooperative banding stations in eastern Canada to secure waterfowl population data.	6,080.00
W-62-R-14,15	Waterfowl Studies. To survey waterfowl populations and habitat; and to provide technical assistance and coordination of statewide waterfowl programs.	461,296.00
W-67-R-14,15	Big Game Research. To gather basic data needed for managing deer, moose, and black bear.	1,026,520.00
W-68-C-14,15	Wildlife Management and Research Coordination. To provide supervision and administration to coordinate P-R program.	291,972.00
W-69-R-14,15	Small Game and Furbearer Research. To gather basic data needed for management of small mammals and nonmigratory birds.	742,772.00

Number	Description	Funds
W-70-L-3	Coastal Island Acquisition (Fishernan's Island). To acquire an island of approximately nine acres to insure the long-term protection of nesting habitat for important sea bird species.	$ 47,900.00
W-71-D-14,15	Wildlife Habitat Development Program - Region A. To encourage maximum production of all game species; to provide recreational hunting opportunity; and to cooperate in game research activities.	199,368.00
W-72-D-14,15	Wildlife Habitat Development Program - Region B. To develop state and private lands for all game species; and to provide utilization of game species for both sporting and non-sporting public; and to cooperate in game research activities.	277,235.00
W-73-D-14,15	Wildlife Habitat Development Program - Region C. To create, improve, and maintain wildlife habitat; to provide access for hunters in wilderness areas, and to cooperate in game research activities.	144,756.00
W-74-D-14,15	Wildlife Habitat Development Program - Region D. To create, improve, and maintain wildlife habitat; to provide access for hunters in wilderness areas; and to cooperate in game research activities.	134,624.00
W-75-D-14,15	Wildlife Habitat Development Program - Region E. To create, improve, and maintain wildlife habitat; to provide access for hunters in wilderness areas, and to cooperate in game research activities.	80,120.00
W-76-D-14,15	Wildlife Habitat Development Program - Region F. To create, improve, and maintain wildlife habitat; to provide access for hunters in wilderness areas; and to cooperate in game research activities.	274,380.00
W-77-D-14,15	Wildlife Habitat Development Program - Region G. To create, improve, and maintain wildlife habitat; to provide access for hunters in wilderness areas; and to cooperate in game research activities.	202,684.00
W-79-S-12,13	Maine Voluntary Hunter Safety Program. To train hunters in the rudiments of firearms safety and improve their ethical behavior while in the field, and to train trappers in the ethical standards associated with trapping.	311,936.00
W-80-T-8,9	Technical Guidance. To protect and improve wildlife habitat by providing technical information and guidance to private and public agencies having land use planning management and/or development responsibilities.	219,680.00
	D-J Total	$ 874,732.00
	P-R Total	4,895,657.00
	Grand Total	$ 5,770,389.00

MARYLAND

Number	Description	Funds
FW-7-C-5	Coordination. To provide supervision and administration of Fish and Wildlife Service - Federal Aid Programs in Maryland under the Wildlife Administration. (50% D-J; 50% P-R).	$ 26,000.00
FW-8-P-4	Comprehensive Plan for Maryland Wildlife Administration. To develop, by 1983, a Fish and Wildlife Management plan and system that will provide strategies for meeting long and short range objectives as well as a review and evaluation of progress towards attainment of objectives. (20% D-J; 80% P-R).	124,605.00
F-13-D-21	Statewide Inland Fisheries Development. To develop, evaluate, and maintain adequate public fishing areas.	47,054.00
F-27-R-10	Estuarine Fish Recruitment Survey. Determine relative annual abundance and distribution of various estuarine fishes.	93,730.00
F-29-R-8	Statewide Fisheries Survey and Management. To obtain baseline physical, chemical and biological information on streams and impoundments.	51,056.00
F-36-R-4	Survey, Inventory and Management of Maryland's Coldwater Fishery Resource. To manage the coldwater fishery resources to maximize recreational trout fishing without adversely affecting the natural resources.	86,000.00
F-37-R-4,5	Investigation of American Shad in the Upper Chesapeake Bay. To estimate the number of juvenile and adult shad; to determine the age structure of the shad population.	131,261.00
W-41-R-20	Statewide Wildlife Disease Investigations. To provide for wildlife parasite and disease investigations and other studies involving disease interrelationships of wildlife and livestock as needed.	7,000.00
W-44-D-18	Statewide Wildlife Development. To conduct habitat management programs on state-owned or state-controlled lands.	826,453.00
W-45-R-16	Marsh and Waterfowl Investigation. To gather information necessary to manage waterfowl and other marsh wildlife; and to determine recreational use of wetlands and associated habitats.	132,700.00
W-47-R-13	Upland Wildlife Investigations. To provide information on the status of upland wildlife species in Maryland.	15,560.00
W-48-R-12	Forest Wildlife Investigations. To provide management data on forest game species and obtain information from hunters who use the resources, so that seasons and bag limits can be established that will allow full use of the resources.	69,743.00
W-52-R-7	Wildlife Turkey Investigations. To determine the status of the turkey population, including studies of reproduction and effect of harvest on population, and success of trapping and transplanting.	35,000.00
W-53-R-3	Furbearer Investigations. To monitor the distribution, status, and trends of certain furbearer species and bobcat populations	11,200.00
W-54-T-1,2	Technical Assistance on Private Lands, Waterfowl Habitat Development and Management. To develop, improve, and manage waterfowl habitat on private lands for the purpose of increasing the amount of suitable habitat available for migrating, wintering and breeding waterfowl in Maryland.	59,550.00
W-55-R-1,2	Black Bear Investigations. To assess the distribution and population status of the black bear in Maryland.	21,523.00
W-56-T-1	Upland Wildlife Habitat Restoration and Protection. To increase the number of acres of upland wildlife habitat in Maryland.	42,340.00

Number	Description	MARYLAND Funds
W-57-R-1	Deer Allocation Preferences Among Three Types of Maryland Deer Hunters. To identify and compare harvest allocation strategies by various classes of deer hunters - muzzle loader, archery and firearm hunters.	$ 12,892.00
W-58-R-1	Maryland Breeding Bird Atlas. To collect data on the breeding bird distribution of Maryland.	29,657.00
H-1-13	Firearms and Hunter Safety Training. To provide instruction and practice in the safe handling of hunting equipment and the avoidance of all types of accidents associated with hunting. Also included in the training - instruction in hunting ethics and responsibility, wildlife identification and the principles of wildlife management.	240,000.00
	D-J Total	$ 447,022.00
	P-R Total	1,616,302.00
	Grand Total	$ 2,063,324.00

MASSACHUSETTS

FW-2-C-8	Fish and Wildlife Coordination Project. To provide supervision and administration to coordinate D-J and P-R activities. (50% D-J; 50% P-R).	52,000.00
FW-7-P-7	Fish and Wildlife Management Planning Project. To develop a comprehensive management plan for the fish and wildlife resources in Massachusetts. (50% D-J; 50% P-R).	68,000.00
FW-9-D-2	Technical Assistance in Fish and Wildlife. To provide technical advice and assistance to Federal, State, local and private organizations or individuals in matters pertaining to real or potential effects of various actions on populations of fish, birds and mammals. (50% D-J; 50% P-R).	88,000.00
F-34-D-16	Statewide Development Project. To develop and maintain the inland fisheries resource and provide access for users.	104,000.00
F-44-R-5	Fisheries Survey and Inventory. To obtain information on the smelt and lake trout in Quabbin Reservoir; biological survey of lakes and streams; creel census for Quabbin Reservoir and Deerfield; sea-run brown trout study project.	200,000.00
F-45-R-2	Anadromous Fish Investigations. To restore and enhance the anadromous fish populations of major Massachusetts rivers.	184,000.00
W-9-D-36	Statewide Development Program. To determine the feasibility of using artificial nesting islands for loon restoration.	380,000.00
W-35-R-26	Game Population Trend and Harvest Survey. Management and harvest evaluation of selected game animals and non-waterfowl game birds.	316,000.00
W-40-R-19,20	Atlantic Flyway Cooperative Waterfowl Banding Program. To measure waterfowl population characteristics in eastern Canada.	6,080.00

Number	Description	MASSACHUSETTS Funds
W-42-R-17	Massachusetts Waterfowl Research Program. To gather waterfowl population data via various banding and censusing techniques in Massachusetts.	$ 68,000.00
W-43-S-12,13	Massachusetts Hunter Safety Program. To provide instruction and practice in the safe handling of hunting equipment and the avoidance of all types of accidents associated with hunting. Also included in the training is instruction in hunting ethics and responsibility, wildlife identification and the principles of wildlife management.	522,000.00
	D-J Total	$ 592,000.00
	P-R Total	1,396,515.00
	Grand Total	$ 1,988,515.00

MICHIGAN

F-35-R-9	Fisheries Research in Michigan. To solve the present and anticipated problems of the fishery manager. Research studies are carried out in six general areas of investigation: 1) Habitat quality and productivity, 2) warmwater fish biology and population ecology, 3) trout biology and population ecology, 4) Great Lakes fish biology and population ecology, 5) quantitative fisheries studies, and 6) fish health and disease investigations.	$ 2,055,597.00
F-40-R-3	Fisheries Information Management. To design, develop, and maintain information systems by 1983, to collect, organize, summarize, analyze, archive, and retrieve information necessary for proper management of the State's fishery resources.	229,363.00
F-46-R-2	Inland Fisheries Management Planning. To maintain a current inventory of fish community and habitat structure and fisheries management problems in all public waters of Michigan; to define and identify fishery management units; to develop policies, procedures and guidelines for preparing plans; and to prepare fishery management plans for identified districts, river basins, and watersheds.	1,020,600.00
F-49-D-1	Railroad Dock Public Access Site. To construct a 36-foot wide concrete plank boat launching ramp and a parking lot for 10 cars and 25 cars with trailers.	35,500.00
F-50-D-1	Dixon Lake Public Access Site. To construct an entrance road, parking lot for 5 cars with trailers, a 24-foot wide gravel boat launching ramp, and a vault toilet at Dixon Lake.	31,500.00
F-51-D-1	Bowers Harbor Public Access Site. To redevelop an access site near TRaverse City, Michigan, consisting of a 36-foot wide boat launching ramp, a parking lot for 45 cars with trailers and 6 cars, 2 vault toilets, and landscaping.	84,000.00
F-52-D-1	Calkins Bridge Fisherman Access. To develop an access site on the west side of the Kalamazoo River below Allegan Dam, including placement of sheet piling, railings, chain link fence, and fill; and construction of a 40-car gravel surfaced parking lot, stairway, and two vault toilets.	80,000.00

MICHIGAN

Number	Description	Funds
F-53-R-1	Great Lakes Fisheries Research & Evaluation. 1) To obtain a continuous record of effort, catch, and catch composition in the Great Lakes and anadromous fisheries; 2) To identify Great Lakes and anadromous fish stocks and determine their spatial distribution, movements, and contribution to the fisheries; 3) To develop, test, and improve decision models which reflect the history, dynamics, structure and management of the Great Lakes fish communities and fisheries; and 4) To develop and experiment with harvest rates, stocking schedules, and lamprey control levels to produce an optimal combination of recreational fishing, commercial fishing, and progress in rehabilitating Great Lakes fish communities.	$ 2,193,562.00
F-54-D-1	Fish Disease Laboratory Remodeling. To modernize the fish disease capability of Michigan to serve the six fish hatcheries in Michigan in areas of disease control, genetics, water quality, and fish production techniques.	190,000.00
W-36-D-47	Southern Michigan Habitat Development. To develop, manage, and maintain wildlife areas in southern Michigan for upland game, forest game, and waterfowl, allowing for compatible public use and benefits.	1,000,000.00
W-98-D-24	Northern Mighigan Habitat Development. To improve and maintain habitat for forest wildlife throughout the northern two-thirds of Michigan.	1,100,000.00
W-119-L-14	Statewide Land Acquisition. To acquire scattered lands, statewide, and inholdings in major wildlife projects for wetland, forest and upland, for compatible public use.	1,000,000.00
W-120-S-14	Hunter Safety. To train and equip volunteer Hunter Safety instructors; to train students; to provide project staff officers and shooting-range officers; to set up an evaluation system to monitor student instruction; and for miscellaneous office and overhead expenses.	607,481.00
W-120-S-15	Hunter Education. To train 40,000 students in firearm safety and hunter responsibility; conduct volunteer instructor workshops, and to monitor and evaluate student and instructor training, and evaluate and upgrade hunter education and responsibility.	744,140.00
W-121-R-10	Wildlife Law Enforcement Research. To evaluate the efficiency/effectiveness of apprehending and prosecuting persons violating license laws during periods of ineligibility, and prepare a final report; to identify one priority management problem which could be solved or better understood through wildlife law enforcement research; to prepare a final report on an evaluation of the effects of law enforcement patrol.	40,793.00
W-122-D-4	Sturgeon River Slough Development. To complete work on dikes and pump stations allowing water control in eight units of approximately 1,050 acres.	27,000.00
W-124-R(SI)-3	Wildlife Surveys and Statistical Surveys. To provide measurements on hunter attitude, opinions, and demographics to improve conditions for hunters; and to provide population information needed for evaluation of division programs.	220,000.00
W-125-D-2	Game Area Maintenance. To provide statewide emergency maintenance work on program funded dams, dikes, and water control structures on waterfowl areas using program generated income from program lands and incidental to habitat restoration work.	100,000.00

Number	Description	MICHIGAN Funds
W-126-D-2	Pointe Mouillee State Game Area Wetland Development and Restoration. To continue the restoration of Pte. Mouillee waterfowl habitats by constructing and reconstructing nearly seven miles of dikes and water control structures.	$ 154,000.00
W-127-R-1	Statewide Wildlife Research. To conduct research studies on deer physiology and behavior, ruffed grouse, beaver and elk; mitigation of agricultural deer damage; redtailed hawk reproduction; and wildlife habitat studies.	616,233.00
W-129-R(SI)-1	Wetland Delineation and Classification. To delineate and classify wetlands in selected areas of Michigan in coordination with the U.S. Fish and Wildlife Service's National Wetland Inventory.	84,000.00
	D-J Total	$ 5,920,122.00
	P-R Total	5,693,647.00
	Grand Total	$11,613,769.00

MINNESOTA

FW-1-R-28	Statewide Fish and Wildlife Surveys. To sound lakes and prepare lake contour maps; to determine effects of Corps of Engineers and large water-oriented projects on fish and wildlife resources, and recommend measures to minimize habitat losses; and to conduct biological surveys of major river systems. (70% D-J; 30% P-R).	177,250.00
FW-3-L-39	Public Access Acquisition. To provide public access to all State public waters of 150 acres or more, and all rivers, by purchase and development of riparian lands. This project segment intends to acquire 37 sites for development under companion project FW-4-D. (100% D-J).	283,500.00
FW-4-D-50	Statewide Public Access Development. To develop 7 new public fishing access facilities and redevelop 6 existing sites as part of a much larger statewide public access development program. (100% D-J).	425,000.00
F-2-L-42	Statewide Fish Habitat Acquisition. Primarily to acquire easements on trout streams for fish habitat restoration and angling access. Northern pike spawning sites are also acquired.	100,000.00
F-26-R-15	Statewide Fisheries Research. To conduct studies on warmwater and coldwater species and make recommendations to resolve fishery management problems.	348,975.00
F-27-D-17	Statewide Lake and Stream Improvement. To rehabilitate three lakes by eradicating the fish populations and restocking; to operate and manage 155 northern pike spawning areas; and to perform development work on 15 trout streams totaling 27 miles of stream length.	178,320.00
F-30-T-2	Statewide Fisheries Technical Advice. To provide evaluation of proposed development project impacts on fisheries' resources to recommend mitigation and/or enhancement measures.	60,000.00

MINNESOTA

Number	Description	Funds
F-29-R-3	Statewide Fisheries Management Planning. To formulate management plans for individual waters; to provide current information on the physical, chemical and biological characteristics of fishing lakes; to provide current information on the physical, chemical, and biological characteristics of important fishing streams and rivers, and to determine fishing and recreational pressure, harvest, catch rate, and size-class distribution or quality of the catch for the principal game-fish species in selected lakes and streams.	$ 884,289.00
W-27-L-100	Statewide Wildlife Land Acquisition. To acquire wildlife lands, statewide, to complete management units for preserving wetlands and other habitats, principally deer yards, pheasant cover, and for prairie grouse.	2,000,000.00
W-41-D-25	Statewide Wildlife Development and Management Operations. To develop, operate, and maintain wetland, upland, and forest habitat for wildlife production, hunting, and other compatible public uses.	2,901,117.00
W-58-S-20	Firearms Safety Training Program. To train and certify 25,000 youths in hunter education and safety; to train and certify volunteer instructors; to purchase and maintain equipment, manuals and other training aids and supplies; and to administer the program.	312,820.00
	D-J Total	$ 2,402,159.00
	P-R Total	5,267,112.00
	Grand Total	7,671,271.00

MISSISSIPPI

F-3-30	Fish Management Coordination. To plan, administer, and coordinate Mississippi's fish restoration program.	$ 82,000.00
F-26-14	Fertilization of State Lakes. To lime and fertilize 15 State lakes to increase their productivity.	32,700.00
F-44-7	Technical Guidance. To provide technical guidance to pond owners.	14,417.00
F-45-6	Survey of Pesticide Parameters. To survey pesticide concentrations in fish and water and monitor fish populations in Delta Lakes; and to determine fish populations in Lakes Moon and Washington.	49,000.00
F-51-6	Central Reservoir Investigations. To conduct a creel survey on Barnett Reservoir and to determine the fish population of Barnett and Okatibbee Reservoirs.	30,816.00
F-58-3	Northeast Mississippi Fisheries Investigations. To survey fish populations in the Tennessee-Tombigbie Waterway and the Noxabee River.	61,700.00
F-59-3	Turcotte Laboratory Pond Fish Production. To rear striped bass fingerlings at the Turcotte Laboratory ponds for release in Ross Barnett Reservoir and Lakes Mary and Bogue Homa.	25,100.00
F-62-2	Old River Sport Fisheries Project. To describe the physical and biological features of fisheries habitat within the Old River Wildlife Management Area.	2,550.00

Number	Description	Funds
F-64-1	North and West Mississippi Fisheries Investigations. To investigate the introductions of hybrid striped bass into selected lakes, to evaluate the effects of hybrids on existing fish populations.	$ 31,300.00
F-65-1	Bolivar County Lake Survey. To survey water quality and bass population structure in Bolivar County Lake.	2,600.00
F-66-1	Float Fishing Stream Investigations. To determine water quality, bottom organisms, float times, and fish populations in selected streams.	16,000.00
F-67-1	Largemouth Bass Investigations. To compare growth and reproductive requirements of largemouth bass from different environments in Mississippi with Florida largemouth bass.	15,800.00
F-68-1	Statewide Fisheries Management Project. To quantitatively measure fish population and harvest in State waters; to fertilize State lakes, and to provide technical guidance to pond owners; to stock fish in selected waters.	594,000.00
W-10-40	Wildlife Program Administration. To plan, administer, and coordinate Mississippi's wildlife restoration program.	92,611.00
W-48-31	Statewide Wildlife Investigations. To conduct Statewide research and survey activities on waterfowl, doves, deer, furbearers, and wild turkeys.	318,756.00
W-49-31	Statewide Wildlife Development. To restore wildlife through development, maintenance, and management of natural habitat; to provide better hunting and controlled utilization of upland game resources through establishment and operation of refuges and public hunting areas.	1,449,728.00
W-54-18	Statewide Waterfowl Development. To restore waterfowl populations through development and management of habitat and to establish and operate refuges and waterfowl hunting areas.	309,686.00
W-57-11	Technical Guidance. To assist wildlife habitat and population management on private lands.	117,329.00
H-3-3	Mississippi Hunter Education Program. To conduct a Statewide hunter education program.	289,295.00
	D-J Total	$ 957,983.00
	P-R Total	2,577,405.00
	Grand Total	$ 3,535,388.00

MISSOURI

FW-10-L-1	Cooper/Morgan County Wildlife Area. To acquire 5,600 acres of farmland, forest, and stream habitat in Cooper and Morgan Counties in central Missouri in a single unit from a willing seller for wildlife, fisheries, and compatible public uses. (25% D-J; 75% P-R)	4,350,000.00
F-1-R-33	Fisheries Management Planning and Research. To gather and provide the biological information and data that are used in making decisions, formulating policies, setting regulations and developing programs that fulfill the Department's responsibility for protecting, enhancing, and managing the aquatic resources of Missouri.	728,000.00

Number	Description	MISSOURI Funds
F-20-R-6	Cooperative Fish Disease Project. To provide diagnosis, treatment, immunization, and study of fish diseases and parasites.	$ 8,000.00
W-13-R-28	Wildlife Management, Planning and Research. To measure population dynamics and habitat usage by Missouri game animals.	825,000.00
W-40-D-25	Charles W. Green Experiment and Research Management Area. To operate and maintain a research field station and wildlife management area.	72,000.00
	D-J Total	$ 1,823,500.00
	P-R Total	4,159,500.00
	Grand Total	$ 5,983,000.00

MONTANA

FW-2-R-13	Lower Missouri River Basin Investigations. To obtain information on existing fish and wildlife populations and their associated habitats. To determine survival needs in the face of continuing land use changes and development. To ensure, as much as possible, that these needs are incorporated into management and development plans. (100% D-J).	67,340.00
FW-3-R-12	Middle Missouri River Drainage Investigations. To survey fish in the Missouri River drainage and its tributaries; to determine physical, chemical and biological characteristics of the waters of importance to the recreational fishery of the planned area. (100% D-J).	86,095.00
FW-4-R-4	Rocky Mountain Front Wildlife Studies. To determine the impact of gas and oil exploration activities on deer, sheep, and elk populations; to provide recommendations to minimize or alleviate the impact of exploration activities on wildlife. (100% P-R).	45,010.00
F-5-R-33	North-Central Montana Fisheries Investigation. To inventory and survey waters of value and of potential value for fisheries management in the north-central region of Montana.	90,168.00
F-7-R-33	Northwest Montana Fisheries Investigation. To conduct surveys, investigations, and research needed to maintain and improve the quality of sport fishing in waters of the northwestern Montana fishery district.	114,897.00
F-9-R-32	Southwest Montana Fisheries Investigations. To determine for salmonids; (1) flow needs; (2) population; (3) fishing pressure and catch rates; and (4) influence of point and non-point pollutants. To monitor flow-temperature growth relationships on selected major trout streams.	30,501.00
F-11-R-31	Northeast Montana Fishery Study. To determine year class strength of walleye and other fishes in Nelson Reservoir and Fort Peck Reservoir; to continue surveillance of fish population in Nelson Reservoir; to conduct stream and reservoir surveys; make chemical analysis of water quality and determine flow requirements needed to maintain the aquatic ecosystem; to acquire harvest and movement information of the Missouri River paddlefish; to evaluate winterkill and species composition in about 20 lakes and reservoirs; to determine trout populations in Bear Paw Mountains.	67,806.00

Number	Description	Funds
F-12-R-30	Western Montana Fishery Investigations. To conduct surveys, inventories, and research needed to maintain and improve the sport fishing in waters of western Montana.	$ 88,681.00
F-20-R-28	South-Central Montana Fisheries Investigation. To conduct surveys, inventories, and research needed to maintain and improve the sport fishing in waters of south-central Montana.	114,788.00
F-30-R-20	Southeastern Montana Fisheries Investigation. To inventory farm ponds suitable for sport fisheries; to conduct fish surveys and investigate for paddlefish in the Yellowstone River and its tributaries.	37,526.00
F-31-R-20	Statewide Fish Habitat Investigation. To minimize stream channel damage through consultations and technical assistance to road builders and others who affect stream channels through habitat alteration or dewatering.	68,322.00
F-33-R-18	Flathead Lake Fisheries Investigation. To investigate fish populations and the chemical and physical characteristics of Flathead Lake.	47,899.00
W-3-C-43	Wildlife Coordination. To provide supervision and administration of the Federal Aid in Wildlife Restoration program for Montana.	112,513.00
W-81-L-28	Maintenance of Federal Aid Lands - Taxes. To make in lieu of tax payments to counties on commission-owned lands acquired with Federal Aid funds.	84,096.00
W-104-R-20	Statewide Wildlife Harvest Surveys. To provide the most reliable estimates of annual harvest of wildlife populations (by species, sex and age), hunting pressure and success; to determine hatching distribution and production ratios of five grouse species.	186,991.00
W-109-L-18	Statewide Lease of Lands. To provide for the lease of 68,429 acres of land for wildlife management purposes.	37,884.61
W-120-R-15	Statewide Wildlife Research. To determine certain ecological requirements and habitat relationships of wildlife; to determine the impace of various land use and human activities on wildlife populations; to develop reliable range survey methods and to provide game managers with guidelines to assist them in the development of improved wildlife management programs.	406,356.00
W-130-R-15	Statewide Wildlife Survey and Inventory. To determine the statewide distribution, characteristics, status, trends, and production of game and waterfowl populations; to provide information for the general management of big game and upland game populations; to formulate recommendations for hunting season regulations.	1,591,600.00
W-133-HS-13	Hunter Safety Coordination. To coordinate and conduct hunter safety training on a statewide basis.	117,504.00
	D-J Total	$ 814,023.00
	P-R Total	2,581,954.61
	Grand Total	$ 3,395,977.61

NEBRASKA

Number	Description	Funds
FW-6-C-43	Fish and Wildlife Management Coordination. To provide direction to program employees in the planning of work, maintenance of records, correlation of Federal Aid activities with other State operations, and providing liaison with other agencies. (40% D-J; 60% P-R).	$ 88,000.00
FW-12-T-10	Cooperation in Interagency Planning Efforts. To participate in interagency planning efforts to assure that projects and programs of other Governmental entities are compatible with the purpose, goals, and objectives of the Nebraska Game and Parks Commission. (20% D-J; 75% P-R).	56,000.00
FW-15-L-13	Acquisition of Riparian Lands. To acquire a 90 acre tract of land inHall County for wildlife production and public hunting and fishing. (10% D-J; 90% P-R).	82,000.00
FW-16-D-6	Administration of Program Lands. To make in lieu of tax payments to 10 counties for lands acquired under both the Federal Aid in Sport Fish Restoration and Federal Aid in Wildlife Restoration Programs. (10% D-J; 90% P-R).	18,400.00
FW-52-R-5	Publication of Hunting and Fishing Bulletins. To prepare, publish, and disseminate hunting and fishing bulletins which inform the public of season dates, harvest limitations, etc. (55% D-J; 45% P-R).	42,000.00
F-7-D-20	Fisheries Development. To develop and maintain fisheries projects and construct public use facilities Statewide.	115,000.00
F-51-R-5	Reservoir Investigation. To evaluate the effect of 300 mm bass length limit on the bass and bluegill population and estimate the total fishing pressure and catch from Maskenthine Reservoir; determine the harvest and population size of crappies in Branched Oak Lake and publish results; determine the suitability of the lake chubsucker as forage for largemouth bass in small man-made impoundments and publish results; monitor and evaluate effect of management strategy in Salt Valley reservoirs; assess overwinter survival of threadfin shad in power plant cooling reservoir; develop procedures for holding threadfin shad at least 8 months and assess the effect of stocking in State lakes; to obtain balance in Lake McConaughy predator-prey system and determine fishing pressure and catch of all fishes.	167,910.00
F-55-R-4	Stream Fishery Investigations. To describe present and future hydrology and land use as they affect three streams in northeast Nebraska, and assessment of accessibility to determine fish species, population size, standing crop, reproduction of each trout species, and length frequency of trout present; to publish information to evaluate the contribution to the Missouri River fishery of predators stocked in the Niobrara River; to develop a genetic marking technique for evaluating stockings of walleye and northern pike into the Missouri-Niobrara system.	21,200.00
F-73-R-2	Nebraska Statewide Fishing Survey. To quantify fishing pressure on major waters, fishing methods, species preference, and months in which fishing takes place.	10,800.00

Number	Description	Funds
F-75-R-1	Missouri River Studies. To describe seasonal and annual variation in adult, larval, and juvenile fish populations, macroinvertebrate populations and environmental factors; construct mathematical models to determine factors contributing to variations in year-class strength; determine changes needed in physical environment to benefit the fishery; to develop brood populations of walleye, northern pike and blue catfish by stocking in the unchannelized Missouri River; and develop a long-term monitoring program.	$ 203,250.00
W-15-R-40	Wildlife Survey and Inventories. To conduct routine surveys which fulfill management information needs on big game, waterfowl, furbearers, upland game birds, and small mammals.	453,800.00
W-17-D-37	Habitat Restoration. To provide development and maintenance activities to improve wildlife habitat and to provide public use access facilities on management areas Statewide.	937,200.00
W-40-S-12	Hunter Safety Training Program. To coordinate and conduct a hunter safety training program Statewide.	142,400.00
W-41-T-9	Technical Assistance in Habitat Restoration. To assist in planning and developing guidelines and wildlife habitat management practices on public lands in conjunction with State habitat fund monies.	18,800.00
W-53-L-9	Acquisition of Wetlands. To acquire an 80 acre tract of land in Clay County for wildlife production and public hunting.	24,500.00
W-53-L-10	Acquisition of Wetlands. To acquire an 80 acre tract of land in Fillmore County for wildlife production and public hunting.	85,400.00
W-57-R-4	Determination of Time of Death for Selected Wildlife Species. Prepare manuscript on work done to develop a pictoral sequence depicting physical changes in the lens and cornea of the eye and correlate potassium levels in the eye with time of death; to identify, monitor and record post-mortem changes in carcasses of selected species.	6,200.00
W-76-L-1	Acquisition of Deciduous Woodlands. To acquire an 160 acre tract of land in Knox County for wildlife production and for public hunting.	70,800.00
	D-J Total	$ 600,500.00
	P-R Total	1,943,160.00
	Grand Total	$ 2,543,660.00

NEVADA

Number	Description	Funds
FW-3-T-3	Statewide Technical Guidance. To provide impact assessment on fish and wildlife resources from proposed land and water use actions by private and public projects, and (2) to provide fish and wildlife habitat input into plans and actions of Federal land use agencies. (30% D-J; 70% P-R).	$ 344,178.00
F-20-R-19	Statewide Fisheries Program. To carry out investigations for the improvement and maintenance of Nevada's fishery resources, with special emphasis on the development of fishery management plans for individual lakes and streams.	696,435.00
F-23-D-15	Statewide Fisheries Development and Operation. To develop, operate and maintain facilities at Kingston-Birch Creek, Eagle Valley Reservoir, Schroeder Reservoir, Cave Lake-Willow Creek Reservoir, the Lower Colorado River Fisherman Access, Illipah Reservoir, Truckee River Access, Fort Churchill Cooling Ponds Access, and other fisheries management areas throughout the State.	9,000.00
F-24-L-16	Statewide Taxes and Leases. To make payment on leases or easements for access fo fishing waters and to counties in lieu of taxes on certain lands acquired with Dingell-Johnson funds.	2,400.00
W-5-D-37	Stillwater Wildlife Management Area. To develop and maintain the area for waterfowl management.	25,000.00
W-48-R-15	Statewide Wildlife Program. To inventory and gather biological data on wildlife species of the State, which include big game, waterfowl, and upland game.	800,316.00
W-51-HS-13	Nevada Hunter Safety Program. To provide training for 3,000 persons in safe hunting practices, basic principles of conservation, and sportsmanship; to assist and provide refresher training opportunities to 300 volunteer instructors; to provide assistance in target range development on a cooperative basis.	152,808.00
W-53-R-10	Statewide Nongame Program. To determine nongame species distribution and document key habitats.	164,000.00
W-54-C-9	Statewide Wildlife Coordination Program.	105,013.00
W-55-D-5	Wildlife Management Area System. To develop and maintain areas for waterfowl and other wildlife primarily in Clark, Lincoln, Lyon, Nye, Pershing, and Washoe Counties.	1,306,458.00
	D-J Total	$ 812,116.00
	P-R Total	2,793,492.00
	Grand Total	$ 3,605,608.00

NEW HAMPSHIRE

FW-17-C-9	Fish and Wildlife Federal Aid Coordination. To provide supervision and administration to coordinate D-J and P-R activities. (50% D-J; 50% P-R).	$ 120,000.00
F-50-R-1	New Hampshire Anadromous and Inland Fisheries Operational Management Investigations. To manage New Hampshire's inland and anadromous fisheries.	354,100.00
W-9-R-37	Statewide Wildlife Survey. To collect data, via survey/census needed for managing furbearers, waterfowl, woodcock and mourning doves.	27,300.00

NEW HAMPSHIRE

Number	Description	Funds
W-11-D-37	Statewide Game and Furbearer Habitat Improvement Program. To develop and maintain public lands for wildlife.	$ 77,650.00
W-12-R-37	Big Game Management Research. To collect, analyze, and evaluate data concerning big game species in New Hampshire.	97,100.00
W-49-R-18	Atlantic Flyway Cooperative Waterfowl Banding Program. To determine population dynamics of selected waterfowl species by banding and banding analysis.	3,690.00
W-66-S-13	New Hampshire Hunter Safety Program. To provide instruction and practice in the safe handling of hunting equipment and the avoidance of all types of accidents associated with hunting. Also included in the training is instruction in hunting ethics and responsibility, wildlife identification, and the principles of wildlife management.	229,360.00
W-75-R-6	Wild Turkey Studies. To determine the extent of wild turkey habitat; to reintroduce, via trap-transplant, wild turkeys in all suitable sites; to monitor established populations.	10,925.00
W-76-R-6	Statewide Wildlife Population Survey. Via track counts, attempt to develop population indices for several furbearer species.	49,200.00
W-77-R-5	Black Bear Studies. To collect and evaluate biological and sociological data on black bears in New Hampshire.	18,000.00
W-79-T-3	Technical Assistance in Wildlife Habitat Management. To provide technical assistance and advice to government and private cooperators concerning wildlife management practices, especially as related to white-tailed deer.	25,000.00
W-81-R-2	Wildlife Energetics Studies. To determine energy requirements of northeastern bobcats at different seasons. To determine prey species abundance and respective nutritive values.	34,720.00
W-82-L-1	Spaulding Lot Acquisition, Charlestown, New Hampshire. To acquire 56 acres of upland adjacent to the 759 acre Hubbard Hill State Forest, which provides habitat for wintering deer.	25,733.00
	D-J Total	$ 414,100.00
	P-R Total	658,678.00
	Grand Total	$ 1,072,778.00

NEW JERSEY

FW-49-C-13	New Jersey Fish, Wildlife and Anadromous Fishery Coordination. To coordinate and supervise New Jersey's fisheries and wildlife programs. (50% D-J; 50% P-R).	$ 52,400.00
FW-56-T-9	Fish and Wildlife Input to the Activities and Projects of Others. Technical review and comments on activities of other governmental agencies and private contracts. (80% D-J; 20% P-R).	105,000.00
F-15-R-25	Marine Fisheries Investigations and Management. To study the food chain, life history, and ecology of marine sport fish, and to determine harvest rates.	70,000.00

NEW JERSEY

Number	Description	NEW JERSEY Funds
F-20-R-22	Research in Trout Management. To determine success of trout stocking in relation to water chemistry and other factors.	$ 40,827.86
F-23-R-19	Research in Warm Water Fisheries Management. To survey and inventory New Jersey lakes; to evaluate introduction of warm-water fish species.	52,000.00
F-34-D-11	New Jersey Statewide Fisheries Development Project. To acquire sites, construct fish ponds, develop and maintain ponds, access sites and parking areas for fishing.	25,000.00
F-35-R-11	Fish Disease and Parasite Investigations. To inventory and assess the role of fish parasites and disease in fresh water fisheries.	10,000.00
F-38-R-5	Delaware River Fisheries Research. To determine the size of the adult American shad run and the relative abundance of juvenile shad in the Delaware River.	54,105.00
F-43-R-2	Raritan Basin Anadromous Fish Project. To determine the feasibility of reestablishing the American shad in the Raritan River system.	20,994.00
F-44-T-2	Marine Fisheries Technical Assistance Project. To provide technical assistance on behalf of New Jersey's marine resources.	27,500.00
F-46-D-1	Prospertown Lake and Imlaystown Lake Dam Rehabilitation Project. To renovate the dams on Prospertown and Imlaystown Lakes.	60,000.00
W-45-R-20	A Study of the New Jersey Deer Herd. To determine numbers of deer, physical condition, and causes of death of deer in New Jersey.	195,000.00
W-46-R-19	Atlantic Flyway Cooperative Banding Program. To operate cooperative banding stations in eastern Canada to secure waterfowl population data.	4,040.00
W-50-S-13, and W-50-S-13-T	New Jersey Firearm Safety Program. To provide instruction and practice in the safe handling of hunting equipment and the avoidance of all types of accidents associated with hunting. Also included in the training is instruction in hunting ethics and responsibility, trapper responsibility, wildlife identification and the principles of wildlife management.	500,403.00
W-51-D-12	Statewide Wildlife Habitat Development Project. To combine game management programs formerly accomplished under W-19-D, W-30-D, and W-38-D for benefit of migratory, big game and upland big game.	456,581.00
W-52-R-12	Upland Wildlife and Habitat Investigations. To determine status and population levels of various game species in New Jersey.	67,850.00
W-58-R-7	Wetlands Ecology. To conduct research, investigations, surveys and planning efforts concerned with wetlands.	91,162.20
W-59-R-6	Furbearer Research. To evaluate the efficiency, selectivity, and effect on target species of various trapping systems.	48,245.00
W-60-R-6	Wild Turkey Research. To re-establish the eastern wild turkey to New Jersey with trap-transfer.	39,824.00
	D-J Total	$ 470,626.86
	P-R Total	1,450,305.20
	Grand Total	$ 1,920,932.06

NEW MEXICO

Number	Description	Funds
FW-14-C-43	Fish and Wildlife Management Coordination. To supervise, administer, coordinate, and provide other support services for New Mexico's Federal Aid in Fish and Wildlife Restoration programs. (25% D-J; 75% P-R).	$ 100,000.00
FW-16-R-10	Fish and Wildlife Comprehensive Planning. To procure, evaluate, and disseminate wildlife and fish management data and programs consistent with goals and objectives outlined in the comprehensive and operational plans and Departmental planning needs. (25% D-J; 75% P-R).	104,500.00
FW-17-RD-11	Nongame Wildlife Studies. To determine or monitor the status and requirements of native mammal and bird species that may be endangered or threatened in New Mexico; to monitor all waters of the State, with particular emphasis on areas in which game species are present with forage or nongame fishes, to determine species composition, population sizes, and habitat parameters of given ichthyo-faunas; and to restore rare or endangered game fishes and associated forage and nongame fishes to their respective historic ranges through stream renovation and transplants. (20% D-J; 80% P-R).	288,000.00
FW-20-D-10	Cimarron Canyon Development. To provide maintenance and surveillance or the recreational facilities on the area. (40% D-J; 60% P-R).	37,300.00
FW-23-D-9	Edward Sargent Fish and Wildlife Area. To maintain wildlife water sources, fences, roads, signs; and, to provide fire protection. (13% D-J; 87% P-R).	12,800.00
F-22-R-25	Statewide Fisheries Investigations. To locate and categorize New Mexico waters; to determine rate of growth, food habits, and angler catch rate of striped bass stocked in Elephant Butte Reservoir; to determine if the rainbow trout fishing in Navajo Lake can be improved by stocking catchable size rainbow trout; to provide estimates of catch rates and composition of catch on individual waters, categories of waters, and statewide; to determine estimates of angler days and fish harvest for fisheries management units and individual waters by postal survey of purchasers of season fishing licenses; to determine causes and effects of unpredictable fishery phenomena.	210,000.00
F-26-D-21	Statewide Fisheries Development. To develop and maintain fisheries areas statewide.	68,380.00
F-44-D-9	Statewide Walleye Fry Plants. To obtain walleye eggs; to hatch and distribute walleye fry to reservoirs having established populations; to provide a source of eggs for other States.	38,000.00
F-48-R-6	Comprehensive Study of Fish Culture Methods, Techniques, and Facilities. To determine water quality parameters of water supply and effluent at each hatchery; to determine pathogenic organisms responsible for mortality of salmonids; and to determine extent of suspected genetic abnormalities in rainbow trout morphology and production parameters.	68,000.00
F-49-L-6	Statewide Fishing Easements. To acquire fishing easements on lakes and streams in New Mexico.	8,000.00

Number	Description	Funds
F-52-R-5	Model for Optimization of Socio-Economic Values on the Rio Grande. To organize and develop a mathematical model of the Rio Grande River in New Mexico for determining potential economic value of sports fisheries and other water recreational activities related to present and future water usage.	$ 176,214.00
F-53-R-5	Trophic Model Development for Reservoirs in New Mexico. To obtain data that will enable development of a trophic-dynamic model for reservoirs in New Mexico.	130,000.00
F-54-D-5	Kokanee Fry Plants. To obtain kokanee eggs, hatch, and distribute kokanee fry.	24,000.00
W-84-D-39	Game Trapping and Transplanting. To trap wildlife from established populations and transplant them in historic or low density areas and provide them for research studies.	128,440.00
W-93-R-26	Game Surveys. To determine harvest recommendations for antelope, Barbary sheep, bighorn sheep, deer, elk, javelina, Ibex, Oryx, and turkey; to determine annual harvest of mountain lion, and to inform the public of harvest regulations and recreational opportunities.	612,565.00
W-99-D-25	Waterfowl Areas Development. To plant herbaceous crops; to maintain capital improvements; to observe and record wildlife use of the areas.	380,500.00
W-101-D-27	Statewide Wildlife Development. To maintain buildings, dams, cattleguards, fences, firebreaks, water units, and other capital improvements.	78,000.00
W-104-R-24	Game Bird Studies. To determine distribution and density of New Mexico's wintering waterfowl populations; to determine changes in mortality rates, distribution, sex and age ratios and relative recovery rates of wintering waterfowl populations in New Mexico, and adjacent States of the Central Flyway; to investigate reported waterfowl poisoning and disease outbreaks and determine causative agents responsible for such outbreaks; to re-establish Hi-Line Canada geese as a significant wintering flock in the Rio Grande Valley; to measure trends in annual harvests of resident and migratory game birds in New Mexico; to determine annual population trends of mourning doves; to determine riparian habitat utilization and the impact of removal, destruction or alteration of such vegetation in the Middle Rio Grande Valley on the distribution, population densities, reproduction, survival, and mortality of mourning doves; to cooperate with public land-use agencies and others in field examinations of wildlife habitats (both wetland and upland); to disseminate information derived from game bird research and survey activities; to determine the distribution, numbers, racial composition and food habits of sandhill cranes migrating throughout and wintering in the Middle Rio Grande Valley and southwestern New Mexico; to develop hunting frameworks for these crane populations.	140,200.00
W-120-S-13	Hunter Safety Training. To administer and coordinate the hunter safety program; to develop training aids; to evaluate the statewide program on a scheduled basis; to maintain a trained force of volunteer instructors statewide.	250,800.00

NEW MEXICO

Number	Description	Funds
W-124-R-8	Big Game Research. To develop a mule deer/ environmental computer model; to identify and evaluate factors influencing mortality and survival of elk; to develop a population/environmental model that will generate expectations of elk population numbers based on measurements of environmental parameters; to further identify the eleaophorosis-elk complex in the Gila National Forest and develop a control for this disease; to evaluate factors influencing bobcat populations and develop methods for determining population status in New Mexico; to investigate occurrences of diseases or abnormalities in wild birds and mammals in New Mexico.	$ 591,000.00
W-125-D-4	Red Rock Wildlife Experimental Area. To contribute to restoration of desert bighorn sheep in southwestern New Mexico.	72,600.00
	D-J Total	$ 847,803.00
	P-R Total	2,671,496.00
	Grand Total	$ 3,519,299.00

NEW YORK

FW-47-T-8	Fish and Wildlife Habitat Protection. Impact analysis on fish - wildlife resources of planned alterations to streams, rivers, and lakes, caused by power plant, transmission lines, pesticide applications, etc. (58% D-J; 42% P-R).	675,862.00
F-5-R-2	Inland Fisheries Management. To manage the fisheries in certain of New York's inland waters.	700,000.00
W-3-D-30	Maintenance of Wildlife Resource Center. To maintain and renovate the wildlife laboratory at Delmar.	59,948.00
W-81-R-31	Upland Game Bird Studies. To design, coordinate, and implement programs for establishing, maintaining and utilizing the upland game bird species of New York.	84,947.00
W-89-R-28	Big Game Management Investigations. To determine population trends, productivity, harvest, and range condition of deer herds; and to study the distribution, home ranges, age criteria, economics and harvest of black bear.	57,153.00
W-105-R-23	Wildlife Ecology, Behavior, and Habitat Improvement in New York. To conduct research projects involving behavior and ecology of white-tailed deer in the Adirondacks.	40,000.00
W-119-R-18	Atlantic Flyway Cooperative Pre-Season Waterfowl Banding Program. To operate cooperative banding stations in eastern Canada to secure waterfowl data.	3,040.00
W-124-R-16	Energy Relationships of Homotherms to Their Environment. To determine energy transactions between the animal and its environment, and to determine the carrying capacity of different forest types.	60,000.00

Number	Description	Funds
W-125-S-13	New York State Firearm Safety Training Program. To provide instruction and practice in the safe handling of hunting equipment and the avoidance of all types of accidents associated with hunting. Also included in the training is instruction in hunting ethics and responsibility, wildlife identification and the principles of wildlife management.	$ 723,041.00
W-126-R-12	Wildlife Surveys and Inventories. To design, coordinate, execute and tabulate wildlife surveys and inventories, and to provide statistical and data processing expertise and service for Bureau of Wildlife studies and programs.	98,575.00
W-146-R-9	Public Attitude Towards Wildlife and Its Accessibility. To design methods and obtain inputs from relevant publics to assist in directing agency wildlife programs.	129,351.00
W-161-T-8	Fish and Wildlife Management Act (FWMA) Coordination and Technical Assistance. To provide coordination of lands under management through the Fish and Wildlife Program.	403,588.00
W-163-R-6	Wildlife Habitat Inventory. To provide the necessary information base for preserving and restoring significant and unique habitats, for influencing land use practices on public and private lands, for managing Bureau of Wildlife lands, and to provide land analysis and mapping service to other units in the Bureau of Wildlife.	246,732.00
W-164-R-3	Furbearer Management Investigations. To implement a comprehensive statewide program to efficiently manage the furbearer resources of New York.	16,000.00
W-165-C-4	Wildlife Management Coordination. To supervise, administer and promulgate the Federal Aid wildlife portion of the Division of Fish and Wildlife Program.	190,848.00
W-166-E-2	Endangered Species Research and Management. To protect, enhance and restore populations of birds and mammals considered to be endangered or threatened in New York State.	193,811.00
W-167-R-2	Evaluation of Impacts of Toxic Substances on Non-Target Wildlife. To identify the potential for detrimental impact of toxic environmental contaminants on wildlife resources and to develop methods for assessing the extent of the damage.	106,322.00
W-168-R-2	Integrated Management of Timber and Wildlife. To develop a series of workshops for Foresters and Wildlife Biologists concerning the integration of Forestry and Wildlife Management Practices.	15,768.00
W-170-D-2	Public Use Development and Environmental Management. To develop public use facilities and environmental management structures on State lands.	813,924.00
	D-J Total	$ 1,095,828.00
	P-R Total	3,523,082.00
	Grand Total	$ 4,618,910.00

NORTH CAROLINA

Number	Description	Funds
F-1-32	Fisheries Administration. To coordinate North Carolina's fish restoration program.	$ 205,000.00
F-22-7	Coastal Fisheries Administrations. To survey fish populations, provide technical guidance, and evaluate environmental impacts in North Carolina's Coastal Fisheries Region. To investigate the decline in egg viability and juvenile survival of striped bass in Albermarle Sound.	109,000.00
F-23-7	Piedmont Fisheries Investigations. To provide technical guidance on fish management to public and private agencies and individuals; to survey fishery resources in public waters; to determine exploitation rate of largemouth bass in Lake Norman, and to determine catch and harvest rates and the effect of a minimum size limit on largemouth bass in selected waters.	211,650.00
F-24-7	Mountain Fisheries Investigations. To provide technical guidance on fish management to public and private agencies and individuals; to survey fishery resources in public waters.	164,200.00
W-57-8	Wildlife Management in North Carolina. To administer the State's Federal Aid in Wildlife Restoration Program; to conduct research and management surveys necessary for evaluation and future guidance of this program; to provide developments designed to benefit native and migratory game, and to increase hunting opportunity and to maintain physical improvements on management areas.	2,363,353.00
H-1-12	HUnter Safety Education Program. To conduct a statewide comprehensive hunter education program.	160,800.00
	D-J Total	$ 689,850.00
	P-R Total	2,524,153.00
	Grand Total	$ 3,214,003.00

NORTH DAKOTA

FW-8-C-43	Fish and Wildlife Coordination. To administer P-R and D-J programs in accordance with Federal regulations, laws and guidelines. (20% D-J; 80% P-R).	$ 36,000.00
FW-10-L-8	State Land Administration. To administer payments in lieu of taxes for lands purchased with Federal Aid funds. (10% D-J; 90% P-R).	51,200.00
FW-11-P-8	Fish and Wildlife Planning. To develop computer capabilities for inventory data, user participation by species and by geographic area, game population modeling, and map display for impact assessment; to develop 5-year management goals and objectives for all fish and wildlife species managed by the Department; to develop data on importance of public lands vs. private lands in terms of hunting effort and total harvest by species; to develop economic data on hunter expenditures by species. (20% D-J; 80% P-R).	88,000.00
FW-13-C-6	Coordination and Technical Assistance. To coordinate long-term planning with other agencies, review environmental statements, and assist landowners in activities that influence fish and wildlife resources. (20% D-J; 80% P-R).	80,000.00

Number	Description	Funds
F-2-R-30	Statewide Fisheries Investigations. To conduct management surveys in streams, lakes and reservoirs to obtain movement, recruitment, fishing mortality, harvest, and other life history information on selected fish populations; to make limnological studies on sport fishery waters; to obtain fish movement information within the Garrison Diversion; to obtain angler response to questionnaires to aid in formulating fishery management policies, practices, and regulations; to determine walleye movement and habitat utilization in Lake Sakakawea; to obtain baseline information on the Garrison Diversion waters; and determine the effect of artificial reef structures on the fishery of selected lakes.	$ 400,000.00
W-23-D-38	Wildlife Habitat Development and Maintenance. To provide development and maintenance activities to improve wildlife habitat and public use opportunities on wildlife management areas.	800,000.00
W-67-R-24	Statewide Wildlife Survey and Investigations. To diagnose wildlife diseases and conduct investigations concerning distemper and EHD; to conduct ecology, population/habitat inventory and harvest studies of upland game, big game, waterfowl, non-game and fur animals; to evaluate stocking of turkeys, ruffed grouse, and Canada geese; to develop a management plan for mid-continent snow geese populations.	720,000.00
W-83-S-12	Statewide Hunter Safety Program. To conduct a statewide hunter safety program.	108,000.00
	D-J Total	$ 445,541.00
	P-R Total	1,837,658.00
	Grand Total	$ 2,283,200.00

OHIO

FW-12-C-43	Fish and Wildlife Coordination. To supervise, administer, and coordinate Ohio's Federal Aid Program. (25% D-J; 75% P-R).	$ 55,300.00
F-29-R-23	Inland Fisheries Research and Survey. To conduct research studies in areas that are new to fishery management in Ohio, or in problem areas where large voids in knowledge prevent the manager from being effective; to conduct management evaluations of current ongoing programs where effectiveness and cost-benefits are not fully known, or to evaluate techniques or programs widely accepted elsewhere but untried in Ohio; and to conduct surveys which provide basic information on subjects or areas where data is limited or nonexistent.	250,468.00
F-35-R-22	Lake Erie Fisheries (Research). To annually determine the status and utilization of Lake Erie fishes as a basis for management recommendations.	187,300.00
F-57-R-6	Evaluation of Fish Management Techniques. To evaluate and improve current management techniques and develop new techniques as related to the stocking of tiger muskie, northern pike, and saugeye; to evaluate the effect of structure on fish behavior; to determine the relationship between macrophyte densities on prey availability, food habits, and growth of largemouth bass and bluegill; to evaluate the comparative survival, growth and food habits of northern pike, muskellunge, and tiger muskellunge in the same lake; and to predict carrying capacities and yields of top predators in Ohio impoundments.	212,000.00

Number	Description	OHIO Funds
W-97-L-29	Grand River Wildlife Restoration Unit. To acquire 202 acres of inholdings in four tracts of upland/woodland for wildlife habitat preservation and restoration and compatible public use in Trumbull County.	$ 48,635.00
W-97-L-30	Grand River Wildlife Restoration Unit. To acquire 670 acres of open, brushy, and timbered upland and marsh on the Grand River Wildlife Area in Trumbull County for preservation, restoration, management, public hunting, and compatible wildlife oriented public use.	517,000.00
W-103-R-27	Upland Wildlife Research. To conduct studies of pheasant and cottontail habitat use, habitat (land use) changes, and to study attitudes toward and opportunities for enhancing wildlife habitat.	140,000.00
W-104-R-26	Wetlands Wildlife Research. To develop waterfowl harvest regulations and cooperative waterfowl research with the Mississippi Flyway Council.	137,500.00
W-105-R-25	Forest Wildlife Research and Management. To develop deer and ruffed grouse harvest regulations and wild turkey range expansion; and to evaluate effects of revegetation cutting on ruffed grouse.	238,500.00
W-107-D-28	Wildlife Management in Northwestern Ohio. To develop, operate and maintain wildlife habitats and facilities for wildlife-oriented recreation on wildlife areas in Wildlife District 2; to administer the Cooperative Hunting Program and provide planting stock and technical assistance to private landowners.	413,650.00
W-108-D-27	Wildlife Management in Northeastern Ohio. To develop, operate and maintain wildlife habitats and facilities for wildlife-oriented recreation on wildlife areas in Wildlife District 3; to administer the Cooperative Hunting Program and provide planting stock and technical assistance to private landowners.	600,000.00
W-109-D-27	Wildlife Management in Southeastern Ohio. To develop, operate and maintain wildlife habitats and facilities for wildlife-oriented recreation on wildlife areas in Wildlife District 4; to administer the Cooperative Hunting Program and provide planting stock and technical assistance to private landowners.	374,000.00
W-110-D-26	Wildlife Management in Central Ohio. To develop, operate and maintain wildlife habitats and facilities for wildlife-oriented recreation on wildlife areas in Wildlife District 1; to administer the Cooperative Hunting Program and provide planting stock and technical assistance to private landowners.	252,400.00
W-111-D-27	Wildlife Management in Southwestern Ohio. To develop, operate and maintain wildlife habitats and facilities for wildlife-oriented recreation on wildlife areas in Wildlife District 5; to administer the Cooperative Hunting Program and provide planting stock and technical assistance to private landowners.	259,000.00
W-123-L-32	Killbuck Wildlife Restoration. To acquire fee title to inholdings - 2 in Wayne County and 1 in Holmes County - in the largest remaining inland marsh in Ohio for wetland wildlife, habitat preservation, and compatible public uses.	187,970.00
W-126-R-10	Wildlife Surveys. To conduct surveys on upland wildlife and furbearer harvests, public use and attitudes, and recommend annual harvest regulations.	57,500.00

Number	Description	OHIO Funds
W-124-S-12	Hunter Safety and Trapper Education. To train and certify 25,000 hunters and 3,000 trappers after completion of the hunter-trapper education course; to maintain program standards; and to train and certify 200 new volunteer hunter education instructors and 100 new trapper education instructors.	$ 472,800.00
W-128-D-10	Wildlife Management of the Magee Marsh Wildlife Area. To manage and maintain wildlife habitat and public access facilities on this 1,791 acre area, and to manage public hunting on the area and on the Ottawa National Wildlife Refuge.	118,000.00
	D-J Total	$ 663,593.00
	P-R Total	3,858,430.00
	Grand Total	$4,522,023.00

OKLAHOMA

FW-16-D-26	Maintenance of Lakes and Access Areas. To maintain lakes and access areas purchased or developed with Federal Aid funds. (85% D-J; 15% P-R).	$ 122,342.00
FW-26-D-13	Upper Blue River. To collect water chemistry and fish population data; to plant food plots; and to maintain capital developments. (80% D-J; 20% P-R).	60,976.00
F-5-C-19	Fishery Management Coordination. To coordinate and supervise the Oklahoma Dingell-Johnson program.	70,000.00
F-29-R-15	Striped Bass Research Study. To determine trends in selected biological parameters of Texoma Reservoir with a developing striped bass population.	35,820.00
F-37-R-6	Fish Research and Surveys for Oklahoma Lakes and Reservoirs. To determine the population size, size structure, and harvest exploitation of the Neosho River paddlefish population; and to compare catch rates, length-frequency, relative weights, and age structure of white crappie from spring and fall fyke net samples to similar data collected by existing electrofishing and gill net procedures under the Standardized Sampling Program.	40,796.00
F-38-R-6	Oklahoma Fisheries Management Program. To make fisheries management recommendations from standardized surveys conducted on existing public waters in Oklahoma; to determine if Standardized Sampling Procedures electrofishing adequately estimates largemouth bass population structure for making management desicions for Oklahoma waters.	380,149.00
F-39-R-6	Largemouth Bass Investigations. To determine if stocking fingerling largemouth bass of a size available on July 1 (3-inch class) at the rate of 500/ha would increase the number of harvestable-size bass and the catch rate of bass in small impoundments (less than 200/ha surface area); to compare growth and catch per unit of effort between Florida and northern largemouth bass when stocked together in small impoundments having existing fish populations and in new impoundments having less than 200 surface ha; to determine the changes in population structure and growth of largemouth bass and bluegill, harvest and catch rate of sport fish, and largemouth bass food habits and forage availability from a 12- to 15-inch protective length range on	

Number	Description	Funds
	Birch Reservoir; to evaluate a protective length range (PLR) regulation for managing the largemouth bass population in Arbuckle Reservoir.	$ 119,482.00
F-41-R-6	Factors Influencing Fish Populations in Oklahoma Lakes and Ponds. To determine effects of fishing pressures and harvest on crappie age, size, and growth in Copan Lake; to relate crappie relative abundance, growth rates, size frequency, age structure, condition and food habits to invertebrate densities and physical factors in Copan Lake; to determine relative abundance, condition, growth and food habits of largemouth bass, white bass, crappie and white bass X striped bass hybrids in a turbid Oklahoma Reservoir.	82,654.00
W-12-C-23	Wildlife Program Administration. To coordinate activities for Oklahoma's Pittman-Robertson program.	285,000.00
W-16-L-19	Spavinaw Hills Land Acquisition Project. To acquire 10 acres of land in Delaware County.	2,500.00
W-21-D-20	Fort Supply Wildlife Management Area. To strip clear by discing; to maintain firebreaks; to conduct hunter use and success surveys; to plant trees and agricultural crops; to maintain capital developments.	44,000.00
W-32-R-34	Migratory Bird Study. To determine population densities, species composition, migration trends, and population distribution of waterfowl, sandhill cranes, and eagles; to determine the number of species harvested, species composition of bag and hunter distribution to assist with harvest regulations for waterfowl, big game and upland game and cranes; to survey breeding populations of mourning doves in Oklahoma; to determine discreteness of the mallard population wintering in Oklahoma with regard to survival rate and to determine harvest distribution and extent of wood duck production within Oklahoma; to determine the incidence of leadshot in waterfowl gizzards in Oklahoma; to determine game harvest by falconers and to formulate falconry-raptor management recommendations; to establish breeding and huntable population of giant Canada geese; to determine status and distribution of migratory birds in Oklahoma.	222,952.00
W-34-D-29	Spavinaw Hills Wildlife Management Area. To thin timber; to survey transect lines to determine population trends; to monitor special deer hunts; to maintain roads, fences, signs, firebreaks, and food plots.	99,652.00
W-38-D-26	Canton Wildlife Management Area. To plant agricultural crops; to clear timber; to conduct game census; to maintain capital improvements.	53,764.00
W-41-D-26	Lexington Wildlife Management Area. To plant crops; to control noxious vegetation; to conduct game surveys; to maintain capital improvements.	67,936.00
W-42-D-30	Atoka Wildlife Management Area. To clear and plant food plots; to clear 100 acres of timber; to manage public hunts; to collect data on use and harvests; to maintain capital improvements; to construct wildlife waterholes.	55,080.00

Number	Description	OKLAHOMA Funds
W-43-D-34	Pushmataha Wildlife Management Area. To plant herbaceous crops, fruit trees and shrubs; to clear timber; to manage public hunts; to collect hunter use and success data; to maintain capital improvements. ..	$ 115,168.00
W-46-D-30	Cookson Hills Wildlife Management Area. To plant herbaceous crops; to mow food plots and unit grounds; to thin timber; to manage controlled permit deer hunt; to determine deer population trends; to maintain capital improvements.	90,216.00
W-54-D-29	Fort Gibson Wildlife Management Area. To plant trees, shrubs and crops; to thin timbered areas; to conduct population inventories; to monitor hunts; to maintain capital improvements.	119,344.00
W-55-D-30	Okmulgee Wildlife Management Area. To plant food plots; to conduct census surveys; to manage controlled hunts; to maintain capital improvements.	79,300.00
W-64-D-23	Hickory Creek Wildlife Management Area. To determine quail population trends; to maintain capital improvements.	94,448.00
W-71-D-28	Ouachita Wildlife Management Area. To plant shrubs; to clear food plots; to develop waterholes; to collect use and success data; to maintain capital improvements.	97,416.00
W-74-D-22	Wister Wildlife Management Area. To manage controlled hunts; to conduct game surveys; to clear and plant food plots; to maintain capital improvements; to construct boundary fence and earthen dike.	207,104.00
W-77-D-26	Gruber Game Management Area. To clear and plant food plots; to conduct game surveys; to manage controlled hunts; to maintain capital improvements.	133,872.00
W-79-D-26	Hulah Wildlife Management Area. To plant shrubs and food plots; to conduct waterfowl surveys; to manage special controlled hunts; to maintain capital improvements.	45,724.00
W-80-R-23	Big Game Investigations. To develop big game harvest recommendations for regular and special big game seasons; to determine if huntable populations of eastern wild turkey can be established in unoccupied habitat in Oklahoma; to establish baseline data on diseases and parasites of deer, determine parasite distribution, identify health problems in deer herds and recommend solutions; to provide technical assistance on forest lands; to measure effects of grazing and industrial forest (clearcutting) management regimes on white-tailed deer and eastern turkey populations in southeast Oklahoma.	276,828.00
W-81-D-24	Tishomingo Wildlife Management Unit. To plant food plots; to control noxious vegetation; to monitor hunters during waterfowl season; to maintain capital improvements.	12,084.00
W-82-R-23	Upland Game Investigations. To determine population status of selected small game species and Rio Grande turkey and develop appropriate species protection and harvest regulations; To determine if huntable populations of turkey can be established in suitable but unoccupied habitat; to provide technical assistance, using requests to land use agencies, and planning agencies and Department personnel to encourage better wildlife habitat management; to determine parameters of furbearer population dynamics, trends and harvest to make informed recommendations for regulations, public information and other management decisions.	270,092.00

Number	Description	OKLAHOMA Funds
W-84-D-20	Ellis County Wildlife Management Area. To plant trees and crops; to conduct hunter use and success surveys; to mainatin capital improvements.	$ 35,952.00
W-85-D-20	Black Kettle National Wildlife Management Area. To plant trees and food plots; to collect hunter use and harvest data; to maintain capital improvements.	28,764.00
W-92-D-18	Altus-Lugert Wildlife Management Area. To plant food plots; to collect hunter use and success data; to maintain capital improvements.	11,956.00
W-93-D-18	Oologah Wildlife Management Area. To plant food plots; to conduct waterfowl inventories; to collect hunter use and success data; to maintain capital improvements; to develop wetland habitat for waterfowl.	53,740.00
W-97-L-5	Osage County Land Acquisition. To lease 160 acres of land for five years.	1,950.00
W-103-D-15	Texoma Wildlife Management Area. To plant shrubs; to control noxious vegetation; to conduct game census surveys; to maintain capital improvements.	51,492.00
W-106-D-13	Rita Blanca Wildlife Management Area. To disc food plots; to plant trees; to conduct game population censuses; to maintain signs and fences.	12,592.00
W-107-D-14	Osage County Greater Prairie Chicken Restoration Area. To maintain roads, signs, fences, and parking areas; to manage special permit hunts; to conduct preseason and mid-winter census surveys.	9,860.00
W-110-S-11	Hunter Safety Program. To administer the statewide hunter safety program; to survey, construct,lease, and/or determine need for target range facilities.	59,130.00
W-111-D-11	Tiak Wildlife Management Area. To plant food plots; to conduct wildlife population surveys; to maintain capital improvements.	23,440.00
W-114-D-10	Optima Wildlife Management Area. To plant trees and shrubs; to maintain fences and signs; to conduct hunter use and success data surveys.	18,120.00
W-115-D-10	Keystone Wildlife Management Area. To plant trees and shrubs; to strip disc fields; to conduct hunter surveys; to maintain capital improvements.	41,984.00
W-116-D-10	Pine Creek Wildlife Management Area. To disc and seed food plots; to make population trend surveys; to collect hunter use and success data; to maintain capital improvements.	36,180.00
W-117-D-10	Heyburn Wildlife Management Area. To plant trees and shrubs; to conduct hunter use and success surveys; to maintain capital improvements.	26,808.00

Number	Description	OKLAHOMA Funds
W-118-D-10	Eufala Wildlife Management Area. To construct 5 miles of boundary fence; to plant food plots; to maintain capital improvements; to conduct hunter use and success surveys.	$ 185,460.00
W-119-D-10	McCellan-Kerr Navigation Area. To plant food plots and mud flats; to conduct hunter use and success surveys; to maintain capital improvements.	63,120.00
W-120-D-9	Hugo Wildlife Management Area. To plant mud flats and food plots; to control vegetation; to conduct census surveys; to maintain capital improvements.	107,004.00
W-121-D-8	Mountain Park Wildlife Management Area. To erect and replace signs; to conduct wildlife population surveys; to maintain capital improvements.	18,228.00
W-123-D-8	Bolen Hollow Wildlife Management Area. To control vegetation; to reseed area; to maintain capital improvements.	15,292.00
W-124-D-7	Kaw Wildlife Management Area. To erect boundary signs; to plant trees and shrubs; to conduct game population surveys; to maintain capital improvements; to seed mud flats.	63,248.00
W-130-R-7	Deer Health Study. To monitor deer herd health in selected areas under differing management schemes; to investigate bluetongue virus infection in white-tailed deer in Oklahoma; to correlate selected test procedures which can be obtained at hunter check stations with field collection data.	38,544.00
W-133-D-5	Waurika Wildlife Management Area. To construct firebreaks; to install boundary signs; to plant trees and shrubs; to conduct hunter use and success surveys; to maintain capital improvements. ..	127,432.00
W-136-R-1,&2	Deer/Cattle Interactions in Southeastern Oklahoma. To select study areas for long-term studies of deer and cattle interactions; to determine seasonal movement and habitat use of deer and cattle by use of radio telemetry; to determine vegetation available for deer and cattle on study areas by clipping vegetation; to develop cover maps of study areas selected for deer and cattle movements.	26,546.00
W-137-R-1,&2	Wild Turkey Habitat Studies in Oklahoma. To determine daily and seasonal movements of turkeys on study area by instrumenting 20 female and 10 male turkeys; to select a method for estimating wild turkey population sizes; to select study sites for future detailed studies of the effects of cattle grazing and clearcuts on wild turkey populations and calibrate vegetation parameters. ..	71,121.00
	D-J Total	$ 881,673.00
	P-R Total	3,530,989.00
	Grand Total	$ 4,412,662.00

OREGON

Number	Description	Funds
FW-18-D-7	Murderer's Creek Wildlife Area. To develop and manage the terrestrial and aquatic habitat on approximately 39,140 acres of forest and range lands for the benefit of all wildlife and to provide the optimum in hunting, fishing, and other wildlife-oriented recreation. (100% P-R).	$ 113,573.00
FW-19-L-1	Lower Deschutes Land Acquisition. To acquire 3,240 acres valued at $1,713,000 alond 13 miles of lower Deschutes River for public use and wildlife habitat.	700,000.00
F-88-R-13	An Ecological and Cultural Study of Deschutes River Salmonids. To determine the most efficient method of rearing Deschutes River spring chinook under hatchery conditions, attain maximal returns of hatchery-reared spring chinook to the creel and augment the natural spawning population.	81,437.00
F-97-R-11	Rogue and Umpqua Fish Counts. To evaluate the Umpqua and Rogue River hatchery program through enumeration of fish passing Winchester and Gold Ray Dams.	58,347.00
F-99-R-8	Trout Investigations. To gather basic information on stocks, status, and harvest of wild trout in selected Oregon streams.	129,287.00
F-102-R-6	Willamette Salmon Studies. To investigate methods to enhance survival of chinook salmon produced at Willamette River hatcheries.	205,733.00
F-103-D-5	Statewide Fish Habitat Improvement. To maintain and improve fish habitat in lakes and streams throughout the State.	203,722.00
F-104-R-5	Hatchery Practices. To determine optimum loading densities for various salmonid species in Oregon hatcheries. To identify chemical and physical factors influencing seaward migration of juvenile steelhead.	128,503.00
F-108-R-4	Warmwater Game Fish Management. To conduct management investigations of warmwater fishes in Oregon.	65,302.00
F-110-D-4	Maintenance of Public Fishing Access Projects. To maintain and repair access sites which have been acquired and/or developed with D-J funds throughout Oregon.	25,000.00
F-115-R-3	Investigation of Columbia and Willamette River Fisheries. To estimate effort and catch of salmon, cutthroat, steelhead, trout, sturgeon, and shad, utilizing the Columbia and Willamette River waters.	136,277.00
F-116-R-3	Trout/Salmon Nutrition Studies. To evaluate the nutritional quality of various diets on coastal cutthroat trout broodstock and fingerlings so that enhancement to greater survival may materialize.	30,066.00
W-9-D-42	Summer Lake Wildlife Area. To continue development and management of the area for waterfowl and public hunting in Lake County.	192,971.00
W-22-D-38	Sauvie Island Wildlife Area. To continue operation and development of the area for waterfowl and for public hunting in Columbia and Multnomah Counties.	398,861.00
W-38-D-31	Statewide Wildlife Habitat Improvement. To increase the wildlife carrying capacity of specific areas.	1,103,698.00

Number	Description	OREGON Funds
W-45-D-32	White River Wildlife Area. To provide a wintering area for big game inhabiting adjacent summer range; to alleviate big game damage on adjacent private land; to develop food and cover resources for maximum wildlife carrying capacities to provide public recreation in Wasco County.	$ 296,456.00
W-46-D-29	Kenneth Denman Wildlife Area. To continue development and management of the area for the benefit of upland game and other wildlife in Jackson County.	69,391.00
W-47-D-30	Klamath Wildlife Area. To continue development and management of the area for waterfowl in Klamath County.	128,093.00
W-48-D-30	Wenaha Wildlife Area. To provide a wintering area for big game inhabiting adjacent summer range; to develop the forage resource to relieve game use on adjacent private lands; to develop the management area for a maximum carrying capacity for the deer and elk compatible with the summer range in Wallowa County.	116,777.00
W-55-D-24	Ladd Marsh Wildlife Area. To continue development and management of the area for the benefit of waterfowl and other wildlife in Union County.	111,330.00
W-17-HS-13	Hunter Education Program. To develop and maintain a comprehensive statewide hunter safety education program.	90,416.00
W-72-D-7	Elkhorn Wildlife Area. To develop and improve the carrying capacity of winter range, provide supplemental feed for elk, alleviate damage conflicts and increase recreational opportunities through planned use of the wildlife resource.	108,350.00
W-73-D-5	Jewell Meadows Wildlife Area. To increase the population of Roosevelt elk, black-tailed deer and other wildlife and fishery resource values by developing and maintaining optimum habitat on the Jewell Meadow Wildlife Area, Clatsop County.	147,768.00
W-75-C-3	Wildlife Research Coordination. To provide fiscal control, supervision, assistance in planning, design and data analysis, and coordination of wildlife research and management activities.	68,333.00
W-76-R-3	Rocky Mountain Elk Ecology. To evaluate big game habitat use and relationships as they relate to elf in northeastern Oregon.	134,925.00
W-77-R-3	Pronghorn Study. To evaluate causes and incidence of antelope fawn mortality to relate habitat utilization to fawn mortality; to monitor effects of coyotes on antelope populations.	108,923.00
W-78-R-3	Roosevelt Elk Habitat Mapping and Inventory. To map and inventory elk habitat components using aerial photography and landsat imagery.	160,041.00
W-79-R-3	Movements and Habitat Use by Merriam's Turkeys in Oregon. To determine the relationship between chronology of movements and types of habitat used by turkeys. Contract study with OSU.	15,720.00
W-80-R-3	Ecology of Bobcat Populations in western Oregon. Contract research study to determine age structure of monitored versus harvested bobcats, habitat preference, movements, and home range of a local bobcat population.	25,044.00

Number	Description	OREGON Funds
W-81-R-2	Ecology of Raccoon in Oregon. Contract research study to determine sample size necessary to estimate population status of raccoon in northwestern Oregon.	$ 19,924.00
W-82-R-1, 42	Eastern Oregon Big Game Populations. To delineate elk herd range by radio monitoring animal movements in eastern Oregon.	43,257.00
W-83-R-1	Wildlife Investigations Laboratory. To measure reproductive potential and age structure of certain elk herds, of bobcat, cougar, and river otter.	52,394.00
W-84-R-1	Oregon Sage Grouse. To determine causes of sage grouse mortality and effects of coyote control on a designated grouse population.	50,034.00
W-85-T-1	Statewide Technical Guidance. To provide review and comment and assessments of impacts to wildlife resources from proposed land and water uses; to provide detailed wildlife habitat input into plans and actions of land use agencies.	228,420.00
	D-J Total	$ 1,413,674.00
	P-R Total	4,134,699.00
	Grand Total	$ 5,548,373.00

PENNSYLVANIA

F-30-D-18	Maintenance and Improvement of Dingell-Johnson Areas. To provide improvements, routine servicing, and maintenance to state-owned properties acquired or developed under the Dingell-Johnson program.	$ 444,000.00
F-57-R-6,67	Fisheries Management Project. To develop fisheries management plans for individual waters or categories of similar waters based on knowledge of the resource.	444,000.00
F-61-T-4	Fisheries Technical Guidance. To provide technical guidance to individuals, groups, local governments, other Fish Commission units, State, Federal, and legislative bodies on fisheries problems.	118,900.00
W-39-D-34	Food and Cover For Wildlife and Farm Game Improvement. To construct small marshes, roads and public facilities; to maintain existing capital improvements; to conduct a farm game habitat improvement program on private lands; to carry out habitat improvements on State game lands; to make herbaceous seedings; to conduct thinnings and clearings; to provide emergency food and salt for game; and to make timber inventory.	6,670,968.00
W-67-L-5	Acquisition of State Game Lands (No. 43). To acquire approximately 700 acres of land for farm game management and development for public hunting.	812,739.35
	D-J Total	$ 2,458,032.00
	P-R Total	7,483,707.35
	Grand Total	$ 9,941,739.00

RHODE ISLAND

Number	Description	Funds
FW-8-C-36	Fish and Wildlife Management Coordination. To provide supervision and administration to coordinate D-J and P-R activities. (40% D-J; 60% P-R).	$ 79,440.00
F-10-D-30	Construction and/or Improvement of Fishing Areas on State-owned Lands. To maintain and construct fisherman access facilities.	184,536.00
F-20-R-25	Fishery Investigations. To evaluate effects of partial reclamation of warmwater lakes; to conduct stream and lake surveys; to survey the Pawcatuck River Drainage; to study white catfish, northern pike, and fathead minnows; and to develop trout management plans.	63,600.00
W-22-D-28	Wildlife Development. To maintain capital improvements; to construct marshes, fences and firebreaks; to post; to plant aquatics and food plots; to thin timber.	264,960.00
W-23-R-27	Wildlife Investigations. To conduct population, production, harvest, migration and food habit studies on waterfowl; and to collect population and harvest data on other wildlife species.	191,216.00
W-29-R-19	Atlantic Flyway Cooperative Pre-season Waterfowl Banding Program. To operate cooperative banding stations in eastern Canada to secure waterfowl population data.	3,040.00
W-30-L-5,6	Arcadia Management Area. To acquire approximately 326 acres of land to provide additional public access, expanded recreational hunting, trapping, fishing and other nonconsumptive recreation as an addition to the Arcadia Management Area.	427,440.00
W-31-S-11	Rhode Island Hunter Education Program. To provide instruction and practice in the safe handling of hunting equipment and the avoidance of all types of accidents associated with hunting. Also included in the training is instruction in hunting ethics and responsibility, wildlife identification and the principles of wildlife management.	60,500.00
	D-J Total	$ 279,912.00
	P-R Total	994,820.00
	Grand Total	$ 1,274,732.00

SOUTH CAROLINA

FW-8-22	Cooperative Statistics. To develop ststistical methods of design and application for specified problems involving fish and wildlife; to provide consultation to the cooperating states. (100% D-J).	$ 12,388.00
F-2-31	Freshwater Fisheries Management Coordination. To plan, administer and coordinate South Carolina's fish restoration program.	150,000.00
F-10-19	Fisheries Investigations in Lakes and Streams - District 1. To evaluate the effects of stream improvements on self-sustaining wild trout populations; to determine effort and catch and survey the fish populations in selected lakes and streams; to construct lake and stream improvements, and provide technical guidance to pond owners.	131,601.00

Number	Description	Funds
F-11-19	Fisheries Investigations in Lakes and Streams - District IV. To determine life histories, populations, and catch of important game and forage species, and collect limnological data in the Catawba-Waterbee River system; to survey and classify streams; to investigate fish kills; to install fish attractors, and to provide technical guidance to public and private fishery managers.	$ 166,708.00
F-15-15	Fisheries Investigations in Lakes and Streams - District II. To evaluate striped bass survival and catch in selected reservoirs; to determine distribution, spawning areas, and catch of sauger in Clark Hill Reservoir; to provide technical guidance to government agencies and private owners; to maintain fish attractors; to introduce predators in reservoirs and evaluate their success.	96,275.00
F-16-14	Fisheries Investigations in Lakes and Streams - District V. To determine the status of largemouth bass and striped bass in Lakes Marion and Moultrie; to provide technical assistance to public and private fisheries managers; to develop fish attractors; to determine population status and harvest of blue catfish from Lakes Marion and Moultrie.	121,399.00
F-18-10	Fisheries Investigations in Lakes and Streams - District III. To determine the success of predator (striped bass) stocking in reservoirs; to compare rotenone and electrofishing in fish population sampling, and to install and maintain fish attractors.	77,503.00
W-13-35	Wildlife Management Coordination. To plan, administer, and coordinate South Carolina's wildlife restoration program.	150,000.00
W-29-27	Cooperative Wildlife Disease Study. To determine the cause of disease outbreaks in wildlife and to devise control measures.	7,000.00
W-30-25	Statewide Wildlife Management and Technical Assistance. To develop, operate, and maintain habitat and capital improvements in order to provide for public use of wildlife resources on a statewide system of Wildlife Management Areas and public hunting areas.	1,943,153.00
W-37-21	Public Dove Fields. To provide additional dove hunting opportunities near metropolitan areas in the Piedmont section of the State.	9,500.00
W-38-20	Statewide Wildlife Research Project. To carry out investigations on deer and turkey pertaining to populations and range conditions and to survey wildlife resource utilization.	60,638.00
W-42-14	Wild Turkey Investigations. To evaluate statewide wild turkey population and distribution trends and management needs; to develop a statewide habitat survey to restore wild turkeys; and to conduct research on the wild turkey in the Francis Marion Wildlife Management Area.	105,950.00
H-1-9	Hunter Education Program. To conduct a comprehensive statewide hunter education program.	325,000.00
	D-J Total	$ 753,874.00
	P-R Total	2,601,241.00
	Grand Total	$ 3,355,115.00

SOUTH DAKOTA

Number	Description	Funds
FW-18-C-36	Fish and Wildlife Management Coordination. To administer P-R and D-J programs in accordance with Federal regulations, laws, and guidelines; to maintain liaison with other agencies. (25% D-J; 75% P-R).	$ 55,850.00
FW-19-C-12	Comprehensive Planning for Fish and Wildlife Resources Management. To inform Department employees, other agencies, and the public of planning concepts and statistical information relevant to the planning operation; to define Departmental missions and goals; to develop and maintain county resource supply inventory and 15-year demand inventory; to develop 5-year aquatic and terrestrial resource objectives, an operational plan to address subprogram priorities, a cost-effective budget, and a performance control system to check operational plan accomplishments and costs. (50% D-J; 50% P-R).	54,322.91
F-15-R-19	Statewide Fisheries Investigations. To select and introduce appropriate coldwater fishes into Lake Oahe and determine their survival and distribution. Determine the influence of walleye fry stocking density on year-class strength and determine angler use and harvest as related to the population. Evaluate split stocking chronology in a South Dakota pond. Develop and evaluate muskellunge and walleye brood stock in power plant reservoirs. Determine food consumption, survival, and growth of hybrid grass carp under controlled conditions, and in stock ponds. Evaluate northern pike and walleye spawning effort in study lakes.	316,887.31
F-21-R-18	Statewide Fisheries Management Surveys. To survey public fishing waters and write management plans; contour map selected lakes; publish a fishing guide annually and make changes in fishing regulations as needed.	82,658.00
W-73-L81-82-83-84-85-87-88	Land Acquisition for Terrestrial Wildlife. To acquire a total of 587 acres for wildlife production and public hunting. These acres are in the following counties: Beadle, Clark, Hamlin, Clay, Hughes, Minnehaha, Union, and Walworth.	214,895.32
W-75-R-26	Wildlife Research. To study ecology, mortality factors, status, distribution, habitat usage, impacts of predators, and value of wetlands for various species including upland game, waterfowl, big game and red fox.	243,170.90
W-81-D-25	Statewide Land Management and Development. To provide development and maintenance activities to improve wildlife habitat and public use opportunities on management areas statewide; to manage a pheasant restoration program on State and private lands including a roadside management activity.	1,740,115.59
W-92-D-22	State Land Administration. To make payments to counties for taxes levied on lands purchased with Federal Aid funds.	112,360.00
W-94-D-18	Coordination of Interagency Affairs. To provide technical assistance for the wildlife habitat improvement program on private lands, and to provide liaison with other Government agencies statewide.	316,111.00
W-95-R-18	Wildlife Management Surveys. To conduct inventory and harvest surveys for all game species; to inventory raptor nesting populations; to determine incidence of disease in big game populations.	439,204.40
W-96-S-13	Hunter Safety Program. To administer a Statewide hunter safety program.	139,370.00

SOUTH DAKOTA

Number	Description	Funds
W-99-D-3	Forest Habitat Improvement in Custer State Park. To thin timber on 1,000 acres of forest land to maximize wildlife habitat benefits; to fence and tree plant for hardwood reestablishment; and to prescribe burn 150 acres for habitat improvement.	$ 83,490.16
	D-J Total	$ 440,669.27
	P-R Total	3,367,766.32
	Grand Total	$ 3,808,435.59

TENNESSEE

FW-6-1	Statewide Fish and Wildlife Resources Project. To administer the State's Fish and Wildlife Restoration Programs; to conduct research and management surveys necessary for evaluation and future guidance of these programs; provide developments designed to benefit native and migratory game and fishes; to increase hunting and fishing opportunities; to maintain wildlife management areas and fishing access areas; and to conduct a hunter education program.	$ 4,381,496.00
	D-J Total	$ 743,297.00
	P-R Total	3,598,199.00
	Grand Total	$ 4,341,496.00

TEXAS

Number	Description	Funds
FW-1-D-30	Sheldon Wildlife Management Area. To control noxious vegetation; to maintain routine surveillance of area; to maintain capital improvements. (25% D-J; 75% P-R).	$ 67,000.00
F-22-D-15	Heart of the Hills Fishery Research Station. To develop and maintain research areas in order to carry out research activities.	51,800.00
F-30-R-9	Statewide Fisheries Management Surveys. To recommend habitat improvement, fisherman information, fish population manipulation, vegetation control, pollution control, fisherman access and facilities development, and fishing regulations for existing and proposed public waters of Texas.	1,417,300.00
F-31-R-9	Statewide Fisheries Research. To evaluate Florida largemouth bass stocks; to determine age and growth of game and forage fishes in Texas waters; to evaluate the lake chubsucker as a forage fish in small impoundments; to evaluate red drum introductions in fresh water; to evaluate coppernose bluegill introductions in ponds; to determine movement and water temperature distribution of striped bass in Lake Whitney and Brazos River; to document the life history of blueback herring in Lake Theo; to evaluate the application of organic and inorganic fertilizers on zooplankton standing crops and production of striped bass and smallmouth bass in hatchery ponds.	401,600.00
F-32-R-5	Monitoring of Coastal Finfish Resources for Sport Fish Management. To monitor trends of relative abundance and size of recreationally important saltwater fishes in Texas coastal bay systems in order to recommend and evaluate fisheries conservation and management regulations.	220,000.00
F-33-R-2	Monitoring of Harvest of Finfish from Texas Coastal Waters. To monitor the harvest of finfish by saltwater boat fishermen from the coastal waters of Texas.	180,000.00
W-14-C-43	Wildlife Management Coordination. To supervise, administer, coordinate and provide support services for the Federal Aid in Wildlife Restoration Program.	1,383,000.00
W-27-D-38	Eastern Wildlife Development and Operations. To plant herbaceous crops; to clear brush and timber; to maintain capital improvements; to control undesirable vegetation; to conduct surveillance checks on fire areas.	135,000.00
W-48-D-33	Black Gap Wildlife Management Area. To manage public hunts on the area; to maintain capital improvements.	80,500.00
W-54-D-32	Gus Engeling Wildlife Management Area. To install directional signs; to repair bridges and culverts; to plant herbaceous crops; to maintain capital improvements.	125,000.00
W-55-D-34	Gene Howe Wildlife Management Area. To control vegetation; to administer special permit hunts; to maintain capital improvements.	39,000.00
W-56-D-31	Kerr Wildlife Management Area. To control vegetation; to manage public hunts; to maintain structures and facilities.	147,000.00

Number	Description	TEXAS Funds
W-67-D-30	Bighorn Sheep Development. To manage controlled hunts; to monitor area to reduce trespass livestock, predators and vandalism; to maintain capital improvements.	$ 57,200.00
W-71-L-10	Las Palomas Wildlife Management Area. To acquire 101.96 acres of land for whitewing dove nesting and/or roosting habitat.	201,024.00
W-78-D-26	Las Palomas Wildlife Management Area. To plant herbaceous crops; to conduct periodic surveillance of area; to maintain capital improvements.	46,000.00
W-83-D-26	J. D. Murphree Wildlife Management Area. To regulate water levels in compartments; to control noxious vegetation; to manage controlled public waterfowl hunts; to maintain capital improvements.	194,600.00
W-87-D-25	Matador Wildlife Management Area. To maintain area developments; to seed food plots; to monitor vegetation changes; to maintain routine surveillance.	58,000.00
W-98-D-17	Statewide Counties and School Districts Fee Payment - Federal Aid Acquisition Projects. Payment in lieu of taxes to counties and school districts having Federal Aid acquisition projects.	163,100.00
W-102-D-15	Chaparral Wildlife Management Area Development. To maintain capital improvements; to monitor vegetation changes; to manage public hunts; to construct field laboratory/check station and maintain deer-proof fence.	180,000.00
W-103-R-14	Nongame Wildlife Investigations. To update lists of endangered avian and mammalian species by increased knowledge, proposing regulations to protect nongame and endangered avian and mammalian species, and disseminating nongame and endangered avian and mammalian species status information; to determine requirements of nongame mammals and nongame avian species.	187,689.00
W-104-S-13	Texas Voluntary Hunter Safety Training Program. To administer the Texas Hunter Safety Training Program.	350,224.00
W-106-R-10	Texas Waterfowl. To formulate waterfowl harvest recommendations; to locate and categorize potential waterfowl habitat on land under the management of State and Federal agencies within Texas; to monitor seasonal losses of waterfowl excluding those taken in annual harvest and to apply remedial treatment; to develop census and capture techniques of wood ducks; to develop techniques for improving modifies waterfowl habitat.	380,000.00
W-107-R-10	Wildlife Resource Planning. To write a strategic plan; to assist program directors and species program leaders in writing 1-year operational plans; to review and comment on environmental impact statements and related documents; to evolve ecological management units and facilitate species management; to evaluate impacts of water development projects and surface mining activities and plan to mitigate losses; to develop general plans, licenses, and overall operating plans for mitigation lands received by the Department; to conduct a hunter attitude survey; to review timber prescriptions for U.S. Forest Service lands, evaluate impacts of land-use practices on wildlife habitat and preserve wildlife habitat on U.S. Forest Service lands through close coordination with the agency.	214,500.00

TEXAS

Number	Description	Funds
W-108-R-7	Upland Game Investigations. To establish upland game harvest regulations; to obtain hunter harvest and recreation use estimates for rabbit, squirrel, quail and wild turkey (spring); to determine Rio Grande turkey movements from winter roost sites; to evaluate lesser prairie chicken releases in Rolling Plains habitat; to determine effects of spraying Azodrine (monocrataphus) on Panhandle ringneck populations; to prepare a publication summarizing squirrel research and management pertinent to Texas, to determine chronology of the bobwhite quail hatch and evaluate field hatching techniques for bobwhites.	$ 685,000.00
W-109-R-7	Big Game Investigations. To determine annual population levels, distribution and herd composition of white-tailed deer; to investigate reports of losses of white-tailed deer and determine factors causing deer mortality; to formulate big game harvest regulations in Texas; to determine statewide harvest, hunter numbers, hunting pressure and effects of regulations on white-tailed deer populations; to determine population distribution, population trends, distribution and quality of black bear; to determine status of bighorn sheep; to evaluate range conditions and estimate range carrying capacity relative to white-tailed deer in the Pineywoods Ecological Area of East Texas; to determine age and weight of both sexes and antler characteristics of buck white-tailed deer harvest; to determine factors which contribute to the formation of spike antlers in white-tailed deer; to determine the antler development of white-tailed deer under field conditions; to measure influence of black buck antelope on white-tailed deer survival and reproduction in a 96-acre enclosure in the Edwards Plateau; to determine age composition, average field-dressed weight and antler development of mule deer harvested; to determine effects of different levels of hunting pressure on population dynamics of javelina and determine social structure and activity patterns within javelina populations in south Texas; to determine net productivity of known age white-tailed deer does in coastal prairie habitat; to determine influence of genetics on antler quality and body size of white-tailed deer under native range conditions in the Edwards Plateau; to assess aspects of burning as a brush control technique for regrowth of ash juniper and its effect on deer habitat and forage on a range in a deferred rotational grazing system by cattle in a light to moderate stocking rate in the Edwards Plateau; to assess the potential biological import of sika deer as a first-order exotic big game competitor of the white-tailed deer in the Edwards Plateau; to determine effects of geographic relocation on the breeding cycles of white-tailed deer; to determine the effect of early weaning dates on the growth and development of white-tailed deer; to determine the immunalogic response of white-tailed deer to avirulent anthorax spore vaccine when administered orally via treated range cubes; to determine interspecific (food) competition between feral hogs and white-tailed deer in the PostOak Savannah Region; to determine extent of mortality and dispersals of adult deer in the Coastal Prairie; to utilize computer deer population modeling as a method of evaluating effects of various harvest rates on deer densities, production and harvest competition.	1,935,750.00
W-111-DR-4	Facilities Revenue Administration. To administer, coordinate, disburse and account for program income. No funds obligated.	0.00

Number	Description	TEXAS Funds
W-112-R-3	Wildlife Environmental Investigations. To review, coordinate, and comment upon Environmental Impact Statements, Environmental Assessments, Section 404, and Section 10 public notices, biennial work plans of electric cooperatives and similar documents; to provide technical planning assistance to governmental agencies or private enterprises.	$ 135,000.00
W-113-D-3	Choke Canyon Wildlife Management Area. To install entrance and information signs; to supervise and conduct public hunts; to conduct periodic surveillance of area; to maintain capital improvements.	55,000.00
W-114-D-2	Walter Buck Wildlife Management Area. To install entrance and boundary signs; to supervise and conduct public hunts; to perform surveillance of area; to maintain capital improvements.	72,000.00
W-115-R-1	Migratory Shore and Upland Game Bird Research and Surveys. To determine seasonal population trends and distribution of migratory shore and upland game birds in Texas; to monitor seasonal losses of migratory shore and upland game birds in Texas; to measure nesting chronology of mourning doves and other avian species; to determine the discreteness and population dynamics at the various segments of white-winged doves in Tomaulipas, Mexico, and Texas.	125,000.00
W-117-R-1	Furbearing Animal Investigations. To formulate furbearing animal regulations as necessary on a statewide basis; to determine annual harvest of furbearing animals; to prepare and disseminate research results and status reports concerning furbearing animals; to determine sex-age structures of raccoon, ringtail, gray fox, and red fox; to determine the relative abundance and distribution of red fox populations statewide; to describe aspects of pelt primeness and quality on a temporal basis for furbearing animals harvested in Texas.	205,070.00
W-118-D-1	Pineywoods Development and Operation. To manage wildlife and administer public hunts on specific tracts of U.S. Forest Service land included under a Cooperative Agreement.	40,400.00
	D-J Total	$ 2,287,450.00
	P-R Total	7,245,307.00
	Grand Total	$ 9,532,757.00

UTAH

FW-8-D-18	Statewide Tax Levies. To make in lieu of tax payments on Federal Aid acquired lands. (1% D-J; 99% P-R).	$ 69,750.00
FW-16-C-43	Fish and Wildlife Management Coordination. To provide for the supervision and administration of Utah's Federal Aid Program, including costs incurred in the investigation of land purchases. (40% D-J; 60% P-R).	104,000.00
F-26-R-9	Bear Lake Cutthroat Trout Fishery Enhancement. To re-establish a substantial sport fishery in this natural lake, occupying some 110 square miles astride the Utah-Idaho border, by determining optimum sizes, season, and numbers for stocking, rearing, and distribution of Bear Lake cutthroat trout into Bear Lake.	229,863.00

Number	Description	UTAH Funds
F-28-R-12	Colorado River Drainage Reservoirs, Management, Investigation, and Surveys. To monitor the biological and physical aspects of fisheries in the Colorado River drainage reservoirs and tailwaters as they apply to sport fishing trends, and development and management measures.	$ 182,215.00
F-42-R-5	Mountain Lakes Fishery Survey. To survey, inventory and recommend management for the lakes of the Uintah Mountains, and re-write the fisherman's booklet for the high Uintah Lakes, publish and make available for public distribution.	90,000.00
F-43-R-4	Fishery Research Supervision and Coordination. To provide direction and coordination for the Division's fishery research programs and to provide input for and liaison with fishery research projects of other research agencies and organizations.	31,416.00
F-44-R-4	Statewide Fisheries Management Investigations and Surveys. To survey and inventory waters of the State, and determine fish harvest, catch rate, and fisherman use trends on State waters; to establish range of Salmo clarki utah and S. c. pleuriticus; to monitor fish populations and habitat; to assess survival, growth, etc., and stocking survival; to analyze data and prepare reports; to evaluate management practices and make recommendations; and to cooperate with Federal, State, local and provate agencies to assess development.	325,000.00
F-45-L-1	Upper and Lower Bowns Reservoir Conservation Pool. To acquire the perpetual rights to 370 acre feet of water in Upper Bowns reservoir to protect the fishery by preventing excessive draw down and to provide public fishing.	87,500.00
W-11-L-17	Twelve Mile Big Game Winter Range. To acquire a 404 acre tract of land in Sanpete County to be managed for big game winter range and public hunting.	108,640.00
W-32-L-8	Lost Creek Big Game Winter Range. To acquire a 71 acre tract of land in Summit County to be managed for big game winter range and for public hunting.	15,573.80
W-65-RD-32	Statewide Wildlife Management Investigation and Survey. To measure game and furbearer harvest, productivity, population trends, age-sex composition, and movements; to determine the effect of recreational home developments on deer habitat; to determine condition and utilization of big game ranges; to develop management plans.	760,310.00
W-82-R-29	Game Range Restoration Studies. To identify and test plants having apparent potential for improving productivity of big game ranges with emphasis on winter ranges in Utah; to develop and test cultural methods for seed production and harvest; to determine germination characteristics, longevity, and beneficial treatments for seed; to determine the effects of grazers on plant succession; to determine planting and establishment requirements of suitable forage plants.	171,000.00
W-105-R-19	Big Game Livestock Relationships Survey. To establish the time and extent of mule deer, elk, and livestock use on different vegetative winter ranges and determine the relative productivity of each type for wintering deer and elk; to determine dietary composition, forage consumption and habitat preferences for mule deer; to determine nutritive quality of forage species; to determine the importance of vegetative type, livestock grazing, and climate on mule deer summer ranges.	41,000.00

Number	Description	UTAH Funds
W-105-R-20	Big Game Livestock Relationships Survey. To establish the time and extent of mule deer, elk, and livestock use on different vegetative winter ranges, and determine the relative productivity of each type for wintering deer and elk; to determine dietary composition, forage consumption and habitat preferences for mule deer; to determine nutritive quality of forage species; to determine the importance of vegetative type, livestock grazing, and climate on mule deer winter range.	$ 45,500.00
W-117 LDR-15	Statewide Waterfowl Program. To determine waterfowl population numbers, distribution, trends, production, mortality, harvests, and hunting pressure; to develop and maintain the maximum amount of wetland habitat for waterfowl.	475,000.00
W-120-S-4	Statewide Hunter Safety Program. To develop classroom and target range facilities at the Lee Kay Center for Hunter Education near Salt Lake City.	72,719.43
W-120-S-5	Statewide Hunter Safety Program. To develop classroom and target range facilities at the Lee Kay Center for Hunter Education near Salt Lake City.	160,000.00
W-125-L-1	Coalville Big Game Winter Range. To acquire a 332 acre tract of land in Summit County to be managed for Big Game Winter Range and public hunting.	122,948.75
W-133-R-4	Remote Sensing of Large Ungulates to Estimate Their Numbers. To develop and test a remote sensing system to reliably estimate mule deer populations on winter ranges.	40,000.00
W-135-R-4	Statewide Big Game Range Inventory. To determine ownership, vegetative types, composition, production, age-form class, trends, and time of usage of big game ranges; to evaluate the impact of habitat improvement projects.	80,000.00
	D-J Total	$ 988,291.50
	P-R Total	2,224,144.48
	Grand Total	$3,212,435.98

VERMONT

FW-14-C-34	Fish and Wildlife Management Coordination. To plan and coordinate Vermont's Federal Aid Program. (50% D-J; 50% P-R).	165,000.00
FW-16-L-2	Tinmouth Channel Acquisition. To acquire approximately 1,293 acres of wildlife habitat for preservation of critical wetlands and deer wintering areas, for public hunting and fishing and protection of riparian rights. (40% D-J; 60% P-R).	194,548.00
FW-17-T-10	Technical Assistance in Fish and Wildlife. To provide technical assistance to private landowners, land-use planners, State and Federal agencies in management of fish and wildlife habitat. (60% D-J; 40% P-R).	62,000.00

Number	Description	Funds
F-12-R-17	Inventory, Evaluation and Management of the Fisheries and Habitat of the Public Waters of Vermont. To conduct physical, chemical and biological surveys of lakes, ponds and streams; and to study Lake Champlain walleyes and lampreys.	$ 229,412.00
W-33-R-22	Waterfowl Investigations. To determine annual changes in waterfowl population levels, to investigate ecological regulations and behavioral aspects of Canada geese, and to survey controlled waterfowl hunts.	120,000.00
W-34-R-21	Vermont White-Tailed Deer Study. To determine distribution, abundance and status of wild cervids in Vermont.	84,350.00
W-35-R-18	Atlantic Flyway Cooperative Waterfowl Banding. To operate cooperative banding stations in eastern Canada to secure waterfowl population data.	3,460.00
W-37-R-16	Wild Turkey Restoration Program. To determine the extent of Vermont's turkey habitat, transplant turkeys, and evaluate spring hunting season.	25,341.00
W-38-R-16	Black Bear Investigation. To determine abundance and distribution of black bear, removal rates, sex, and age composition, and annual population increment.	30,000.00
W-41-S-13	Hunter/Firearms Training Program. To provide instruction and practice in the safe handling of hunting equipment and the avoidance of all types of accidents associated with hunting. Also included in the training is instruction in hunting ethics and responsibility, wildlife identification, and the principles of wildlife management.	216,869.00
W-45-R-4	Furbearer Investigations. To develop a program for monitoring the status of furbearers in Vermont.	26,084.84
W-46-D-3	State Wildlife Habitat Development Project. To conduct a statewide wildlife development/maintenance program on public and private lands with emphasis on winter deer habitat improvements.	240,000.00
	D-J Total	$ 426,931.20
	P-R Total	970,133.64
	Grand Total	$1,397,064.84

VIRGINIA

FW-1-R-25	Cooperative Statistical Project. To develop statistical methods of design and applications for specified biological problems involving fish and wildlife; and to provide statistical consultation for existing research. (25% D-J; 75% P-R).	$ 12,114.00
FW-8-L-2	New River Land Acquisition (Ivanhoe). To acquire 7.65 acres of land to provide public access for fishing. (25% D-J; 75% P-R).	12,866.66
FW-11-D-1	Biota of Virginia (BOVA). To provide a statewide computerized data base and management system. (50% D-J; 50% P-R).	90,000.00

VIRGINIA

Number	Description	Funds
FW-12-D-1	Briery Creek Lake Construction. To construct an 800-acre lake on Briery Creek in Prince Edward County to provide improved waterfowl habitat and serve as a hunting and fishing focal point. (25% D-J; 75% P-R).	$ 1,690,711.00
F-39-P-6	Fisheries Management Investigations. To develop integrated, statewide multiyear plans and programs for Virginia's public freshwater fishery resources.	401,246.00
F-41-R-1	Fisheries Research Investigations - Major Predators and Forage Species. To evaluate the factors associated with the recent Smith Mountain Lake predator fish population decline.	22,000.00
F-42-D-1	Fishes of Virginia (Book). To develop a publishable manuscript for the freshwater fishes of Virginia.	200,000.00
W-31-C-36	Wildlife Management Coordination. To provide supervision and administration to coordinate P-R activities.	108,604.00
W-48-D-25	Statewide Habitat Development. To develop and maintain habitat for Virginia's principal migratory and nonmigratory species on management units located throughout the State.	1,374,059.00
W-64-S-4	Volunteer Hunter Education Program. To educate hunters and persons wishing to hunt in basic and ethical practices so as to increase the numbers of ethical and responsible hunters in the field.	378,705.00
W-74-R-2	Virginia Wildlife Investigations. To conduct research and survey studies on Virginia's wildlife resources.	511,065.00
W-76-L-1	Land Acquisition, Rapidan WMA (Snead). To acquire approximately 490.24 acres of land adjoining Rapidan Wildlife Management Area to be used for public hunting and associated recreation in the northwestern section of Greene County, Virginia.	255,722.00
W-77-R-1	Nongame and Endangered Wildlife Investigations. To determine the status of nongame and endangered species in Virginia.	126,158.00
	D-J Total	$ 1,098,178.62
	P-R Total	4,085,072.88
	Grand Total	$ 5,309,409.50

WASHINGTON

FW-2-T-1	Environmental Protection. To preserve and enhance fish and wildlife habitat in the State of Washington through project review, field investigations, and issuance of permit approvals for both public and private projects. (33% D-J; 67% P-R).	382,035.00
FW-3-C-1	Federal Aid Coordination. (30% D-J; 70% P-R).	40,136.00
F-39-D-28	Lake and Stream Rehabilitation, Statewide. To eradicate undesirable fish and establish environment capable of supporting a maximum number of game fish.	91,000.00
F-43-D-27	Statewide Maintenance of Dingell-Johnson Projects. To maintain capital improvements constructed with D-J funds.	66,816.00

Number	Description	Funds
F-55-D-20	Development and Management of Federal and Migratory Fish-Rearing Areas - Whitehorse and Skykomish Ponds. To provide efficient management of anadromous game fish rearing ponds in Skagit and Snohomish Counties to enhance the sport fishery.	$ 143,918.00
F-56-R-16	Pathology of Fish Diseases and Hatchery Pollution. To identify and recommend treatment for diseases of hatchery trout; to monitor pollution caused in Game Department hatcheries.	87,297.00
F-71-R-3	Warmwater Fishery Investigations in Washington. Life-history studies of important warmwater game fish species. Technical guidance and interpretation of warmwater fish programs.	50,000.00
F-72-R-3	Puget Sound Salmon Sport Sampling. A creel census to primarily determine contribution of various salmon stocks, catch and effort, species composition and accumulation of life-history data.	173,475.00
F-73-R-3, &4	Wildstock Coho Trapping and Tagging. A program to capture and tag wild coho smolts, mark w/cwt and determine distribution and rate of contribution to the various fisheries. Adult trapping is also pursued.	275,590.00
F-75-R-2	Anadromous Fish Investigations in Washington. To analyze data on anadromous species, set regulations, regulate salmon escapement, and coordinate tribal-State treaties.	98,000.00
F-76-R-1	Biological Characteristics of Resident Populations of Chinook and Coho Salmon. To determine the factors that influence the distribution, production and catchability of chinook and coho salmon in Puget Sound, the origin of salmon caught in the sport fishery, and the effect of hatchery rearing and release strategies.	33,153.00
F-77-R-1, &2	Status of White Sturgeon Resource in the Mainstem Columbia River. To determine the sturgeon's population size, its migration patterns, growth rate, feeding habits and spawning characteristics; to measure catch and effect in the recreational fishery.	196,848.00
W-27-R-35, &36	Waterfowl Investigations. To determine the production and harvest of waterfowl in Washington in relationship to the management of waterfowl in the Pacific Flyway.	283,659.00
W-41-D-32, &33,	Statewide Farmer Coop. Upland Game Access and Habitat Development. To provide habitat for upland game birds and hunter access to privately owned farm lands for the purpose of upland game bird hunting.	601,924.00
W-42-L-33	Statewide Lease of Wildlife-Habitat Lands. To lease lands for the benefit of wildlife.	53,715.00
W-70-R-22, &23	Upland Game Bird Investigations. To analyze, on a statewide basis, the upland game bird populations and factors affecting their production and survival.	146,657.00

Number	Description	Funds
W-77-D-13, &14	Emergency Wildlife Feeding and Herding. To provide supplemental feeding on a statewide basis for big game and upland game bird species during critical winter periods; to herd big game mammals from private lands to areas where they may be supplementally fed.	$ 57,152.00
W-78-CR-14	Wildlife Management Coordination. To provide administration and supervision of the Federal Aid in Wildlife Restoration program in relation to research and game management.	60,223.00
W-79-R-14, &15	Statewide Hunter Harvest. To determine by mail questionnaire the statewide game harvest of all wildlife species.	103,442.00
W-83-WS-12	HUnter Education Program. To provide the administration and supervision necessary for firearm safety and hunter safety training; to provide training opportunities for 5,000 students; to provide certification and training seminars for 70 volunteer instructors.	106,841.00
W-84-R-10, &11	Native Cats of Washington. To inventory populations and analyze mortality data.	139,116.00
W-92-R-3, &4	Landsat Ground Cover Classification. To develop Landsat ground cover classification resulting in habitat type distribution maps for eastern and western Washington.	114,006.00
W-93-R-2, &3	Big Game Investigations. To evaluate the status and effects of harvest on deer in Washington State.	294,931.00
W-94-D-1	Habitat Management Area System. To develop and maintain the Washington Department of Game's statewide Habitat Management Area (19 in number) Program which provides important habitats to a wide variety of wildlife on 700,000 acres of land.	1,674,445.00
	D-J Total	$ 1,354,314.00
	P-R Total	3,920,065.00
	Grand Total	$ 5,274,379.00

WEST VIRGINIA

FW-2-C-24	Fish and Wildlife Management Coordination. To provide supervision and administration to coordinate D-J and P-R activities. (25% D-J; 75% P-R).	$ 215,000.00
FW-4-T-15	Statistical Design and Analyses, Data Processing, Survey and Inventories. To assist in design and analysis of data; to process data; and to conduct surveys and inventories as needed by research projects. (25% D-J; 75% P-R).	243,000.00
FW-5-R-8	Evaluation of Game and Fish Research Proposals. To review and evaluate proposed and ongoing research projects. (30% D-J; 70% P-R).	13,100.00
FW-6-T-4	Interagency Coordination. To coordinate with various Federal, State and private agencies in reviewing land, water, mining and other development projects to protect and/or enhance fish and wildlife resources. (25% D-J; 75% P-R).	245,000.00

WEST VIRGINIA

Number	Description	Funds
F-10-R-26	Stream and Lake Surveys. To investigate sport fishing conditions through lake and stream surveys and creel census; and to test stream improvement methods.	$ 169,000.00
F-11-R-22	Reservoir Investigations. To determine limnological and fish population characteristics of reservoirs; and to determine the rate of harvest.	96,000.00
F-20-D-11	Statewide Fisheries Development. To develop and manage the State's fishery resources to provide the maximum fisherman use opportunity and utilization.	111,000.00
F-24-R-3	Acid Water Studies. To develop an efficient method to neutralize acid loads in lightly buffered West Virginia trout streams.	49,000.00
W-39-R-26	Forest Game Research. To band and tag samples of forest game; to obtain data on productivity and harvest for turkey and grouse.	57,000.00
W-41-D-21	District Wildlife Management and Investigations. To construct roads, dams, erect signs, plant trees, make herbaceous seedings on state-owned and cooperator lands; to thin and clear; and to develop cooperative game management areas.	1,350,000.00
W-42-R-19	Atlantic Flyway Cooperative Waterfowl Banding Program. To operate cooperative banding stations in eastern Canada to secure waterfowl population data.	3,040.00
W-43-S-13	Hunter Safety Education. To provide instruction and practice in the safe handling of hunting equipment and the avoidance of all types of accidents associated with hunting. Also included in the training is instruction in hunting ethics and responsibility, wildlife identification, and the principles of wildlife management.	336,000.00
W-44-R-13	Big Game Investigations. To conduct biological investigations of big game species in West Virginia.	98,500.00
W-46-R-9	Furbearer Research. To determine the population density of certain West Virginia furbearers.	15,400.00
W-47-R-1	Migratory Game Bird Research. To determine the status of Canada goose releases in West Virginia.	8,200.00
	D-J Total	$ 604,750.00
	P-R Total	2,404,490.00
	Grand Total	$ 3,009,240.00

WISCONSIN

Number	Description	Funds
FW-18-T-3	Technical Assistance for Fish and Wildlife Disease Detection and Prevention. To provide diagnostic services, develop training programs and disease contingency plans for the detection and prevention of diseases in fish and wildlife. (52% D-J; 48% P-R).	$ 131,043.00
F-83-R-19	Statewide Fishery Research. To conduct fishery research investigations on management problems related to both warm-water and cold-water fishes.	579,620.00
F-84-L-49	Statewide Fish Management Land Acquisition. To acquire in fee title 2,000 acres of fish management land, primarily to enhance trout fishing access and quality.	1,000,000.00
W-141-R-19	Statewide Wildlife Research. To conduct statewide wildlife research on birds, mammals, and associated habitat.	666,711.00
W-142-L-66	Statewide Wildlife Management Land Acquisition. To acquire 2,000 acres of wildlife lands, statewide, through lease and fee title for preservation and restoration of habitat, management, public hunting, and compatible wildlife oriented public use.	2,000,000.00
W-144-S-13	Statewide Hunter Education. To train 18,000 hunters via basic and advanced hunter education courses; to develop training aids; to complete research projects and incorporate findings into hunter education curriculum; and to train volunteer instructors.	417,750.00
W-145-D-11	Development of the Sandhill-Meadow Valley Work Unit. To operate and maintain wildlife habitats and wildlife-oriented public-use facilities on this 85,000 acre complex in Juneau, MOnroe, and Wood Counties.	168,200.00
W-146-D-10	Development of the George W. Mead and McMillan Marsh Wildlife Areas. To develop, maintain, and operate two central Wisconsin wildlife management areas, totalling 32,254 acres, for game and nongame wildlife species, and wildlife-related public use.	142,667.00
W-147-D-10	Development of the Glacial Lake Grantsburg Wildlife Management Areas. To continue the development, maintenance, and restoration of wet prairie habitats in Burnett County for waterfowl, prairie grouse, and other wildlife; to provide the facilities for public use and enjoyment of these wildlife resources.	122,300.00
W-148-D-10	Wisconsin Prairie Chicken Management. To develop and maintain prairie chicken habitat on approximately 12,000 acres on three management units in Adams, Wood, and Portage Counties.	23,100.00
W-149-D-10	Forest Wildlife Habitat Development. To develop and maintain improved habitat conditions for deer, ruffed grouse, bear, and other game and nongame wildlife species on public forest land in central and northern Wisconsin.	331,100.00
W-153-D-6	Wild Turkey Restoration in Southwest Wisconsin. To reestablish wild turkey populations in areas of suitable habitat; to monitor the turkey hunting season; to conduct population and range surveys.	47,600.00

Number	Description	WISCONSIN Funds
W-154-R-1	Status of Timber Wolf in Wisconsin. To determine behavior of timber wolf packs pioneering in northwestern Wisconsin; distribution and number of wolves elsewhere in northern Wisconsin.	$ 47,000.00
W-154-R-2	Status of the Timber Wolf in Wisconsin. To determine location, numbers, and ecology of the timber wolf in Wisconsin.	59,200.00
	D-J Total	$ 1,632,930.00
	P-R Total	4,103,361.00
	Grand Total	$ 5,736,291.00

WYOMING

FW-17-P-2	Comprehensive Management. To fund all activities in the Wyoming Game and Fish Department program eligible for cost-sharing under the Pittman-Robertson and Dingell-Johnson Acts using the Comprehensive Conservation Plan Option (P.L. 91-503). (19% D-J; 81% P-R).	$ 4,609,055.00
	D-J Total	$ 875,720.60
	P-R Total	3,733,334.40
	Grand Total	$ 4,609,055.00

AMERICAN SAMOA

F-2-R-7	American Samoa Fish and Fishery Investigations. To determine the composition and structure of various inshore fish communities; to measure effort exerted by sport/subsistence fishermen on nearshore fish populations; quantify the resultant catch, and recommend management techniques to insure continued high yields, to monitor the pelagic sport fishery resource, particularly for long term trends and fluctuations.	$ 90,000.00
	D-J Total	$ 90,000.00
	P-R Total	0.00
	Grand Total	$ 90,000.00

GUAM

FW-2-R-20	Fish and Wildlife Investigations. To monitor fish and wildlife populations and habitats; to investigate exotic fish and wildlife species. (37% D-J; 63% P-R).	$ 285,750.00
F-2-D-5	Fisheries Development. To maintain Masso Reservoir and existing artificial reefs and fish aggregating devices, and to stock game fish in Masso Reservoir.	10,000.00
	D-J Total	$ 114,750.00
	P-R Total	181,000.00
	Grand Total	$ 295,750.00

NORTHERN MARIANA ISLANDS

Number	Description	Funds
FW-1-C-2	Fish and Wildlife Coordination. To develop and plan a basic wildlife and sport fishery program for the Northern Marianas. (39% D-J; 61% P-R).	$ 60,943.00
F-1-R-1	Sport Fish Program. To identify pelagic, deepwater, and reef fishes and determine trends in changes of population size.	116,357.00
W-1-R-1	Wildlife Surveys and Inventories. To determine status, trends, and habitat use of wildlife species in Northern Mariana Islands.	145,914.00
	D-J Total	$ 139,852.00
	P-R Total	183,362.00
	Grand Total	$ 323,214.00

PUERTO RICO

Number	Description	Funds
FW-1-13	Puerto Rico Fish and Wildlife Coordination. To plan, administer and coordinate Puerto Rico's fish and wildlife restoration program. (50% D-J, $34,024.00; 50% P-R, 34,024.00).	$ 68,048.00
FW-3-5	Puerto Rico Fish and Wildlife Integrated Research. To obtain basic biological and economic information on the sport fisheries and wildlife of Puerto Rico for the management of these resources. (20% D-J, $6,152; 80% P-R, $24,608.).	30,760.00
FW-4-4	Puerto Rico Fish and Wildlife Technical Guidance. To conduct field investigations and provide technical guidance to government agencies planning projects that impact fish and wildlife resources. (50% D-J, $68,616; 50% P-R, $68,616.).	137,232.00
FW-6-2	Puerto Rico Fish and Wildlife Preplanning Project. To complete current fish and wildlife planning efforts and develop a fish and wildlife planning project. (50% D-J, $47,500; 50% P-R, $47,500.).	95,000.00
F-5-2	Puerto Rico Sport Fisheries Research and Survey. To conduct a creel survey on Cidra Reservoir; to assess habitats of reef and seagrass fishes; and to determine fish abundance in 3 Puerto Rican reservoirs.	147,275.00
W-8-27	Puerto Rico Wildlife Studies. To conduct a population study on brown pelicans.	12,826.00
W-9-13	Puerto Rico Wildlife Development. To develop and maintain capital improvements, manage habitat, and control public use on management areas.	165,345.00
W-10-2	Endangered Birds Research. To determine suitability of reintroduction sites for endangered birds of Puerto Rico.	68,252.00
W-11-2	Studies on Resident Game Birds. To study status, abundance, breeding biology, and harvest of game birds in Puerto Rico.	72,473.00
	D-J Total	$ 303,567.00
	P-R Total	493,644.00
	Grand Total	$ 797,211.00

VIRGIN ISLANDS

Number	Description	Funds
FW-3-3	Virgin Islands Fish and Wildlife Program. To conduct research and surveys of Virgin Islands columbids, waterfowl, seabirds, and fishery resources, and to develop and maintain wildlife and fishery capital improvements and habitats. (38% D-J; 62% P-R).	$ 256,334.00
	D-J Total	$ 97,406.92
	P-R Total	158,927.08
	Grand Total	$ 256,334.00

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